CHAPTER 3.0 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

3.1 Effects Found Not Significant As Part of the EIR Process

This section discusses environmental issues that were identified as potentially significant during the Notice of Preparation process, but were determined to be less than significant during preparation of the SEIR. Specifically, impacts related to the following issues were found not to be significant as part of the SEIR process: hazards and hazardous materials, hydrology and water quality, and utilities and service systems.

3.1.1 Hazards

The previously certified EIR for the EOMSP identified significant and mitigable impacts for Health and Safety related to the use of hazardous materials by industrial operations and transportation of hazardous materials. Mitigation measures were identified to reduce potential impacts related to hazardous materials to below a level of significance. The proposed Project and future development permits for the Project site would be required to comply with these mitigation measures, which would reduce Project impacts related to hazardous materials to below a level of significance. Chapter 7.0 of this SEIR, *List of Mitigation Measures and Environmental Design Considerations*, includes a summary of all of the applicable mitigation measures from the EOMSP EIR which would continue to be enforced upon approval of the proposed Project. Because impacts associated with hazardous materials already have been determined to be less than significant with incorporation of the applicable mitigation measures, no additional hazardous materials analysis is warranted in this SEIR.

Since the EOMSP EIR was adopted, there have been changes in the circumstances under which the EOMSP was undertaken related to wildland fire hazards. San Diego County has been subjected to severe wildland fires in recent years which pose serious threats to development in close proximity to wildlands. Also, the San Diego Regional Water Quality Control Board has directed co-permittees, including the County of San Diego, to implement hydromodification requirements to limit the discharge and duration of stormwater runoff. The Project has been designed in conformance with the hydromodification standards, and as a result there is the potential for standing water to be present in proposed detention basins following storm events. The presence of standing water on-site may result in vector (mosquito) breeding, which could adversely affect human health. Accordingly, this section focuses on the potential for the Project site to be exposed to adverse impacts associated with wildfires and vectors (mosquitoes). The analysis in this section is based on a Fire Protection Plan (FPP) prepared by Hunt Research Corporation, titled "Conceptual Fire Protection Plan for Hawano Industrial Development" (March 2011), provided as Appendix I.

3.1.1.1 Existing Conditions

Fire Safety

Fire Service

The Project site is served by the San Diego RFPD. Fire services to the Project site would be primarily provided by Interim Station 22 at Bailey Prison on the north end of Alta Road, which is located approximately 3.4 roadway miles from the site (with completion of roadway improvements proposed by the Project). In addition, the RFPD Engine Company at Donovan Prison can also respond. Response also is available, via an Automatic Aid agreement, from the CVFD. CVFD

Station 7's Engine Company and Truck Company are located approximately 7 roadway miles from the site (via SR 125), reflecting a response time of approximately 10 minutes. An engine company from the San Diego City Fire Department station, located at Brown Field, also could respond via an automatic aid agreement, and a San Diego City Fire Department ladder truck is located approximately six miles from the site.

Wildland Fire Hazards

The Project site lies within an Urban-Wildland Interface (UWI) area, and is located within a "high" Fire Hazard Severity Zone, as mapped by the California Department of Forestry and Fire Protection[1]. The site exhibits evidence of past fires; however, there is no recent history of wildfire at the Project site, although there is a recent history of wildfires occurring in the immediate area. The site is located approximately 2.0 miles west of the Otay Fire, which burned approximately 46,291 acres in October 2003, and approximately 2.75 miles south of the Harris Fire, which burned approximately 90,440 acres in October 2007. Potential wildfire fuel loads on-site and in the surrounding areas are relatively high under existing conditions, and primarily consist of tall, dry grasses. However, such hazards would be reduced as surrounding properties and roadways are developed.

Vectors (Mosquitoes)

Mosquitoes have the potential to carry disease, representing a potential adverse effect to human health if potential vector breeding sources are not managed properly. The Project site contains several small road pools located along the northeastern and west-central boundaries of the site, which are characterized by temporary/seasonal pools of water. Road pools do not provide suitable habitat for mosquito breeding when dry; however, when filled, road pools contain standing water that may provide suitable breeding habitat for mosquitoes. No known mosquito, or other vector, issues have been reported for the site.

3.1.1.2 Analysis of Project Effects and Determination as to Significance

East Otay Mesa Specific Plan Final EIR

The Final EIR for the EOMSP evaluated the issue of Hazards under the subheading, "*Health and Safety*." The Final EIR indicates that implementation of the EOMSP would result in significant but mitigable impacts to Health and Safety. Specifically, the EOMSP indicates that the light industrial uses have the potential to use hazardous materials, and that industrial and commercial activities occurring to the south in Tijuana, Mexico could expose people residing or working in the EOMSP area to hazardous materials. In addition, the Final EIR identifies impacts associated with the transportation of hazardous materials to and from the EOMSP site which could expose people to these substances.

Since the EOMSP Final EIR was certified in 1994, there have been changes in the circumstances under which the project was undertaken related to Hazards. In 2001 the County of San Diego adopted a Consolidated Fire Code, which replaced the individual local fire regulations that had previously been established by each individual fire protection district. On September 28, 2011, the County Board of Supervisors ratified the 2011 Consolidated Fire Code, amended the County Fire Code, and revised Board Policy F-48. The original EIR for the EOMSP evaluated the consistency of

[1] Source: http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf648.pdf. Accessed March 4, 2011.

the EOMSP against fire regulations that have since been replaced; therefore, an updated analysis is necessary to demonstrate Project-level consistency with the currently-adopted 2011 Consolidated Fire Code. Additionally, the Project site is located within the declared UWI area or a Hazardous Fire Area, and an FPP was prepared by the Project applicant and approved by the Fire Chief and DPLU (as a general proposal) pursuant to Section 96.1.4903 of the County's 2011 Consolidated California Fire Code. The FPP assesses fire safety issues, including water supply, access, building ignition and fire resistance, fire protection systems and equipment, defensible space, and vegetation management. In addition, the County of San Diego has implemented hydromodification requirements to limit the discharge and duration of stormwater runoff. The Project has been designed in conformance with the hydromodification standards, and as a result there is the potential for standing water to be present in proposed detention basins following storm events. The presence of standing water on-site could result in vector (mosquito) breeding, which may adversely affect human health. Therefore, based on the potential for new impacts from potential hazards that were not previously disclosed the County of San Diego has determined that a supplemental analysis of impacts due to hazards is required in order to identify, disclose, and mitigate for any previously undisclosed impacts that could result from Project implementation.

Wildfire Regulations

Guidelines for the Determination of Significance

The Project would have a significant adverse effect related to hazards if any of the following would occur as a result of a Project-related component:

(1) The Project cannot demonstrate compliance, or offer Same Practical Effect, with applicable fire regulations, including but not limited to the California Fire Code, California Code of Regulations, County Fire Code, or the County Consolidated Fire Code.

(2) The Project is inconsistent with the recommendations (including fuel modification) of a required comprehensive Fire Protection Plan.

Thresholds 1 and 2 are derived from the County of San Diego's "Guidelines for Determining Significance, Wildland Fire and Fire Protection" (August 31, 2010), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Wildland Fire and Fire Protection" are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. Inconsistency with Threshold 1 and/or 2 may result in a significant risk of loss, injury, or death and would be considered a significant impact.

Analysis

The Project proposes to subdivide the property to allow for the future development of 23 industrial lots. No structures would be constructed as part of the Project, and the ultimate layout of future structures and intensity of future development are unknown at this time[2]. A conceptual FPP has been prepared for the Project.

[2] As described in Section 1.2.1.1 of this SEIR, the proposed Project would allow for the construction of a maximum of 852,426 s.f. of light industrial land uses on the site.

The conceptual FPP evaluates the Project site to determine whether special design features are warranted with future site development. As concluded in the FPP, the Project would not present a catastrophic wildland fire hazard, and the FPP does not provide any requirements that go beyond that already required by County Code, state law, or by the Rural Fire Protection District. The FPP recommends that landscaping along streets (both on- and off-site) exclude prohibited plants (as identified in Section 11.1.5.2 of the FPP), and this recommendation is reflected on the Project's landscape plans which excludes all of the prohibited species. In addition, the County would review future Site Plan applications to ensure that future site-specific landscape plans and building techniques adhere to the County of San Diego Consolidated Fire Code (San Diego County Code of Regulatory Ordinances, Title 3, Division 1, Chapter 1), including Appendix II-A; the County of San Diego Building Code (San Diego County Code of Regulatory Ordinances, Title 5, Division 1); the State of California Building and Fire Code SFM Amendments, Chapter 7A, CBC/ART 86 CFC; California Public Resource Code Sections 4290 and 4291; and California Code of Regulations Title 14 Sections 1270-1299 "SRA Fire Safe Regulations." Future plans also would be subject to review by the Rural Fire Protection District. The FPP also recommends a fuel modification zone, which is already required pursuant to County Fire Codes, State law, and requirements of the Rural Fire Protection District. Standard compliance with these requirements would insure that Project implementation does not result in a significant risk of loss, injury, or death associated with wildland fire hazards. Accordingly, a significant impact resulting from a conflict with applicable fire regulations or an approved comprehensive FPP would not occur with Project implementation.

Emergency Response

Guidelines for the Determination of Significance

The Project would have a significant adverse effect related to hazards if any of the following would occur as a result of a Project-related component:

(3) The project cannot meet the emergency response objectives identified in the Public Facilities Element of the County General Plan or offer Same Practical Effect.

Threshold 3 is derived from the County of San Diego's "Guidelines for Determining Significance, Wildland Fire and Fire Protection" (August 31, 2010), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Wildland Fire and Fire Protection" are herein incorporated by reference pursuant to CEQA Guidelines Section 15150.

Analysis

Fire protection service would be provided by Interim Station 22 at Bailey Prison on the north end of Alta Road, which is located approximately 3.4 roadway miles from the site (with completion of roadway improvements proposed by the Project). According to the Project's Fire Service Availability form (see Appendix E), the Project is eligible to receive service, and has an anticipated emergency response time of five (5) minutes. A five minute response time would be consistent with the emergency response travel time objective for industrial and commercial development, as established by the Public Facilities Element of the County General Plan.

However, under near-term conditions, Alta Road would not provide a connection between the existing fire station and the proposed Project site. As a result, emergency vehicles would be required to travel from Alta Road to Otay Mesa Road to Enrico Fermi Road to Airway Road, which

would reflect a total travel distance of 3.4 miles and would take approximately 6.5 minutes (or slightly in excess of the PFE's five minute response time requirement). Although the travel distance to the site would not meet the standard PFE response time, PFE Section 11: *Fire and Emergency Services*, Policy 1.2, Implementation Measure 1.2.2, notes the following:

> *If the appropriate emergency travel time cannot be met for a proposed project, the discretionary project will be denied unless sufficient mitigation measures are included as a basis of approval based on the recommendations of the Director and the responsible agency providing fire protection.*

Although the General Plan PFE mandates a five minute maximum travel time for the Project's proposed development intensity, the General Plan does not address arrival time of multiple units, which are necessary for fire operations in commercial structure fires. Although the proposed Project may be on the fringe of (or slightly beyond) five minutes travel-time from the nearest current temporary San Diego RFPD station, it will be within five minutes when a new station is constructed on RFPD-owned property on Lone Star Road. Further, the Project site is barely over five minute travel time from San Diego City Fire Station 43, and from RFPD Bailey Prison Station. Therefore, a commercial fire dispatch today would generate a response of three engines, all arriving within slightly over five minutes. The County of San Diego Fire Marshall and the RFPD Chief both reviewed these conditions and determined that the proximity of multiple fire stations that would be able to access the site in slightly more than five minutes time is more than adequate to mitigate for the temporary station travel time that exceeds five minutes for portions of the Project site [refer to the correspondence between the County, RFPD, and the Project's Fire Protection consultant, contained in the appendices to the Project's Fire Protection Plan (SEIR Appendix I)]. Accordingly, the proposed Project would not conflict with the General Plan PFE standards for emergency response travel times, and a significant impact would not occur.

In addition, Section 503.1.2 of the County's Consolidated Fire Code specifies the maximum distance normally allowed for dead-end roads. Section 503.1.2 specifies that the cumulative length of dead end roads should not normally exceed 800 feet for properties that are zoned for lot sizes smaller than one acre. Under near-term conditions (i.e., prior to the construction of the portion of Via de la Amistad between the western Project boundary and its existing terminus near Enrico Fermi Drive), the maximum length of dead end roads on-site would be approximately 2,000 feet in length. However, the San Diego RFPD reviewed the proposed Project and its FPP requirements, and determined that the Project was eligible for an exception to the dead-end road length requirements of Section 503.1.2 based upon the following findings that were made by the RFPD Chief and the County Fire Marshal pursuant to the County Consolidated Fire Code Appendix Chapter 1, Section 104.8, "Modifications":

1. An existing, connecting (unpaved) road (Via de la Amistad), which would make the Project roads code-compliant, traverses government-owned property and is acceptable for emergency ingress/egress purposes;
2. Proposed road widths associated with the proposed Project (64 feet of improved area) are more than three (3) times the minimum requirement outlined in state Code Title 14 (18 foot improved width), and twice the County Consolidated Fire Code minimum standard; and
3. Most of the on-site vegetation is non-native grassland and approximately three (3) feet in height, the site does not have steep slopes, and the type of vegetation on-site in a coastal

atmosphere has the ability to produce flame lengths of only 13 feet in a Santa Ana type of fire situation.

Based on these findings, the RFPD Fire Chief and the County Fire Marshall determined that the service response times to the proposed Project site under near-term conditions comprise the "same practical effect" as the PFE emergency response times for properties zoned for smaller than one acre in size site [refer also to the correspondence between the County, RFPD, and the Project's fire protection consultant, contained in the appendices to the Project's Fire Protection Plan (SEIR Appendix I)].

Based on the foregoing analysis, the proposed Project would provide the "same practical effect" as required by the General Plan PFE for dead-end road distance and emergency vehicle response times. Accordingly, impacts would be less than significant.

Vectors (Mosquitoes)

(4) The project proposes a BMP for stormwater management or construction of a wetland, pond or wet weather basin that could create sources of standing water for more than 72 hours, and as a result, could substantially increase human exposure to vectors, such as mosquitoes, that are capable of transmitting significant public health diseases or creating nuisances.

Threshold 4 addresses the Project's potential to create sources of standing water, which provides excelled habitat for vector breeding, particularly where water would be standing for more than 72 hours. 72 hours is the time generally required for mosquito breeding to occur.

Analysis

As discussed in SEIR Section 1.2.1.1, the proposed Project requires a detention basin to adequately attenuate stormwater runoff volumes generated on-site. In conformance with County of San Diego hydromodification requirements, the detention basin would incorporate low flow, outlet orifices to control the rate and amount of outflow discharged from the site, and as a result, the drawdown time after a 100-year storm event would be 38 hours. As such, the proposed detention basin would not have the potential to be suitable habitat for mosquito breeding because standing water would not be present for more than 72 hours following peak storm events. As discussed in SEIR Section 2.2, the Project would physically disturb the entire site and there would be no potential for on-site vernal pools and/or road pools to contain standing water that may provide suitable breeding habitat for mosquitoes. Therefore, implementation of the proposed Project would not result in a substantial increase in the exposure of humans to vectors because there are no conditions that would create standing water for a period in excess of 72 hours; accordingly, a significant impact associated with vectors would not occur.

3.1.1.3 Cumulative Impact Analysis

Cumulative Impacts Identified by the EOMSP Final EIR

The EOMSP Final EIR (1994) indicated that implementation of the EOMSP would not result in cumulatively significant impacts to health and safety because adjacent development to the north and west of the EOMSP area was thought to be developed with residential uses.

Project-Specific Cumulative Impact Analysis

A study area was defined in order to assess the cumulative effect of the Project's impacts to hazards. In defining the study area, a number of factors were taken into consideration, including natural features, vegetation types, climate, and topography. The resulting study area encompassed the Otay Mesa portion of the County of San Diego and the eastern portion of Otay Mesa within the City of San Diego. With respect to fire hazards, this study area is appropriate because a majority of the Otay Mesa community is located within an UWI with high fire hazard risks. With respect to vector hazards, this study area is appropriate because a majority of the Otay Mesa community is, or will be, developed with large-scale mixed industrial land uses which would may require stormwater facilities that may create standing water, such as detention basins, to attenuate stormwater flows. Figure 3.1.1-1, *Cumulative Study Area – Hazards*, depicts the cumulative study area and lists all projects that are considered in this analysis.

Research was conducted that resulted in a list of 39 past, present, and reasonably foreseeable projects within the study area, and to determine whether any impacts have been identified related to fire hazards and vector hazards. EIR Section 1.7 provides a summary of all the projects that were considered along with their identified impacts to each of the environmental issue areas addressed by this EIR. As identified in EIR Table 1-7, *Cumulative Projects CEQA Summary*, no projects within the cumulative study area would result in potentially significant impacts related to fire hazards. All development projects within the cumulative study area would be required to incorporate fire resistive construction and landscaping, as required by the County of San Diego Consolidated Fire Code, including Appendix II-A; the County of San Diego Building Code; the State of California Building and Fire Code SFM Amendments, Chapter 7A, CBC/ART 86 CFC; California Public Resource Code Sections 4290 and 4291; and California Code of Regulations Title 14 Sections 1270-1299 "SRA Fire Safe Regulations." Accordingly, with mandatory compliance with the above regulations, all projects within the cumulative study area would reduce fire hazard risks to below a level of significance. Therefore, because there are no additional projects within the study area that would result in adverse fire hazard impacts, and because the Project would implement mitigation for potentially significant fire hazard impacts, the Project would not result in a significant cumulative impact due to fire hazards.

With respect to vector hazards, all development would be required to comply with the vector control requirements of the County of San Diego Department of Environmental Health (DEH), and would subject to monitoring by the DEH's Vector Control Program. Accordingly, all projects within the cumulative study area would minimize the amount of suitable vector breeding habitat to ensure that human exposure to vectors would not increase. Additionally, the Project would not result in the introduction of vector hazards. As such, implementation of the Project would result in a less than significant cumulative impact due to vector hazards.

3.1.1.4 Significance of Impacts Prior to Mitigation

No significant impacts were identified; therefore, no mitigation measures would be required.

3.1.1.5 Mitigation

Mitigation Measures from the EOMSP Final EIR

Mitigation measures were identified by the EOMSP Final EIR (1994) to address impacts to Health and Safety resulting from implementation of the EOMSP, and include the following:

10A. Any industrial development adjacent to residential uses shall submit a Hazardous Materials and Management Plan to the County Department of Environmental Health for approval.

10B. Transportation of hazardous substances shall be conducted in accordance with the California Code of Regulations and the Code of Federal Regulations.

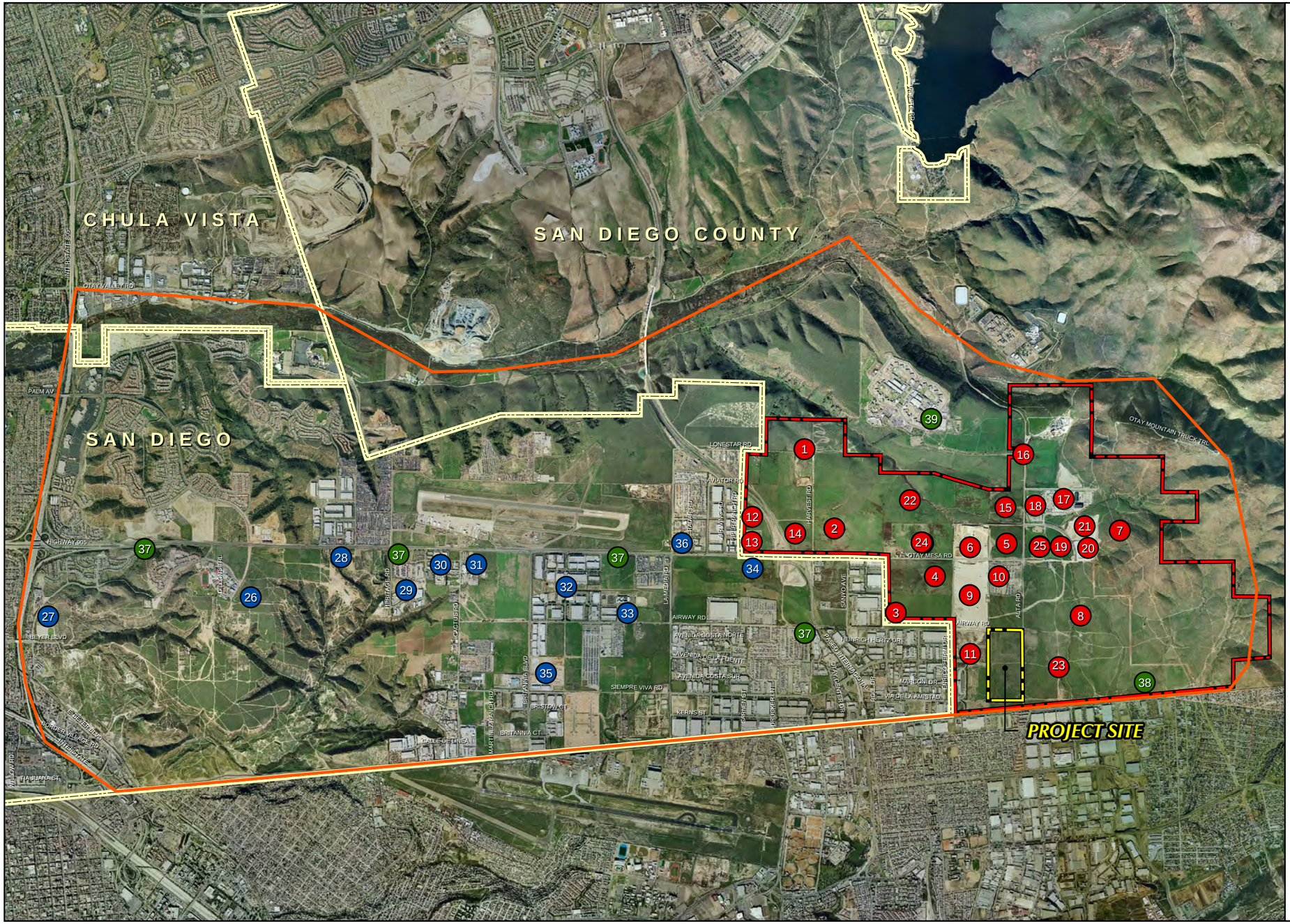
These mitigation measures would not apply to the proposed Project. The proposed Project site is surrounded on three sides by planned light industrial land uses, and abuts a vacant piece of land and the U.S./Mexico international border on the south; as such, the Project site is not located adjacent to residential uses and EOMSP Mitigation Measure 10A would not apply. Mitigation Measure 10B requires compliance with existing state and federal law which already would apply to all subsequent implementing projects. Additionally, as noted in the above analysis, implementation of the proposed Project would not result in a significant impact related to the issue of Hazards.

Project-Specific Mitigation

Significant impacts due to fire protection services were not identified, and mitigation measures from the EOMSP Final EIR either do not apply or already are addressed under current state and federal law. As such, no new mitigation is required.

3.1.1.6 Conclusion

Based on the analysis provided above, implementation of the proposed Project would not result in any direct or cumulative impacts to vector hazards or fire safety. The Project site currently achieves acceptable response times from emergency services, and all existing laws and regulations either have been incorporated into TM5566 or would be incorporated into future designs for the site. Additionally, future implementing projects would be required to either implement the recommendations contained in the current FPP or would be required to submit a new site-specific FPP to demonstrate that significant fire hazard impacts would not occur. Furthermore, significant impacts associated with vector hazards would not occur because there would be no sources of standing water on-site (in excess of 72 hours).



CUMULATIVE PROJECTS

County of San Diego Projects

1. East Otay Mesa Specific Plan
2. Otay Tech Center
3. Airway Business Center/FedEx
4. Enrico Fermi Industrial Park
5. East Otay Auto Storage
6. East Otay Auto Transfer
7. Otay Hills Quarry
8. Otay Crossings Commerce Park
9. Otay Mesa Travel Plaza
10. East Otay Temporary Fire Facility
11. Burke Minor Subdivision
12. Piper Otay Park Subdivision
13. Pilot Travel Center Site Plan
14. California Crossings
15. CCA San Diego Correctional Facility
16. National Enterprises Auto Storage/Recycling
17. Otay Mesa Generating Project
18. Power Plant Laydown Site
19. Paseo De La Fuente
20. Vulcan Site Grading Plan
21. Vulcan Batching Plant
22. International Industrial Park
23. Otay Business Park
24. Ragabo Otay Technology Park
25. OMC Properties Subdivision

City of San Diego Projects

26. Southview
27. Remington Hills
28. Otay Corporate Center South
29. Pacific Gateway
30. Mesa Business Park
31. Otay Heights Business Park
32. Brown Field Business Park
33. Empire Center
34. San Diego Mesa
35. Just Rite
36. World Petrol III

Other Projects

37. SR-905 (Multiple Points)
38. SR-11 and Otay Mesa East Port of Entry
39. CA Health Care Facility, R. J. Donovan Correctional Facility

East Otay Mesa Specific Plan

Hazards Cumulative Study Area

0 2,000 4,000 Feet

FIGURE 3.1.1-1

Cumulative Study Area - Hazards

3.1.2 Hydrology and Water Quality

The information in this section is based in part on three technical studies prepared by Kimley-Horn and Associates. The first report addresses hydrology and drainage and is titled "CEQA Preliminary Hydrology/Drainage Study, Hawano Subdivision" (November 30, 2011). The second study, titled "Major Storm Water Management Plan for TM 5566" (December 2011) is required under the County of San Diego Watershed Protection, Storm Water Management and Discharge Control Ordinance (Ordinance No. 9424) and addresses water quality. The third report addresses hydromodification and is titled, "Preliminary Interim Hydromodification Management Plan, Hawano Subdivision" (April 2012). Copies of these reports are provided as Appendices J1, J2, and J3 (respectively) to this SEIR.

3.1.2.1 Existing Conditions

Regional Hydrology

The San Diego Hydrologic Region, in which the proposed Project site is located, drains westerly toward the Pacific Ocean, covers three million acres, and is composed of eleven smaller watersheds. The Project site is located in the Tijuana Hydrologic Unit (911) which spans the U.S./Mexico border and covers an area of roughly 1,750 square miles, with approximately one-third of the watershed in California and two-thirds of the watershed in Baja California, Mexico. The Tijuana River, the Tijuana Estuary, and Cottonwood Creek are the major bodies of water in the watershed, with the Tijuana River discharging into the Tijuana Estuary and then the Pacific Ocean on the U.S. side of the border.

The Tijuana Hydrologic Unit is divided into a number of hydrologic areas and hydrologic subareas based on local drainage characteristics. The Project site is located in the Tijuana Valley Hydrologic Area and the Water Tanks hydrologic subarea. The beneficial uses of the Water Tanks hydrologic subarea, as documented in the Water Quality Control Plan for the San Diego Basin, are as follows:

> Beneficial Uses for Inland Surface Waters: agricultural supply, industrial service supply (potential), contact water recreation (potential), non-contact water recreation, warm freshwater habitat, and wildlife habitat.
>
> Beneficial Uses for Groundwater: municipal and domestic supply (potential), agricultural supply (potential), industrial service supply (potential).

Existing Drainage Patterns

The Project site is relatively flat and gently slopes to the south. The Project site has three main drainage inflow points from the north along Airway Road. As depicted on Figure 3.1.2-1, *Existing Hydrology*, runoff on the site under existing conditions is conveyed via a series of existing drainage swales in a natural flow condition across the site, and discharges into six existing 7' wide by 4' high box culverts which convey the flows towards the Tijuana River in Mexico.

100-Year Floodplain and Flood Hazard Areas

The Project site and vicinity have been mapped for flood hazards by the Federal Emergency Management Agency (FEMA). Areas identified as high flood hazard areas (*i.e.*, areas within the 100-year floodplain) are notated on FEMA's Flood Insurance Rate Map (FIRM). As mapped by FEMA, no portion of the Project site is located within the 100-year floodplain nor is any portion of the site located within any identified Flood Hazard Areas.

Water Quality

The Tijuana Hydrologic Unit has the highest degree of water quality degradation in San Diego County and is classified as a Category I (impaired) watershed by the State Water Resources Control Board (SWRCB). Urban runoff, sewage spills, industrial discharge, trash, sedimentation, pesticides and eutrophication are the major contributors to the degradation of fresh and groundwater resources[1].

The San Diego RWQCB is a regional agency that is responsible for establishing ground and surface water quality objectives for the San Diego region. These objectives are documented in a document entitled, "Water Quality Control Plan for the San Diego Basin" (September 8, 1994 with amendments effective prior to April 25, 2007), also referred to as the "Basin Plan." The RWQCB also maintains a list of impaired water bodies pursuant to Section 303(d) of the Federal Clean Water Act, and includes on this list those water bodies that fail to meet federal water quality objectives. The Tijuana Hydrologic Unit contains five bodies of water listed as impaired waters by the RWQCB pursuant to Section 303(d) of the Clean Water Act, including: Barrett Lake, Morena Reservoir, Tijuana River, Tijuana River Estuary, Pine Valley Creek (upper), and Pacific Ocean Shoreline at Tijuana Valley hydrologic area.

3.1.2.2 Analysis of Project Effects and Determination as to Significance

East Otay Mesa Specific Plan Final EIR

The Final EIR for the EOMSP concluded that implementation of the uses envisioned by the EOMSP, including the proposed Project, would result in significant but mitigable impacts to hydrology and water quality. Impacts identified by the EOMSP Final EIR include: potential flood impacts associated with the extension of Alta Road to the north; and the addition of impervious surfaces with future development in the EOMSP which could increase the amount of runoff, potentially increasing flood hazards to downstream properties.

Since the Final EIR for the EOMSP was certified in 1994, the County has adopted the WPO. Compliance with the WPO requires preparation of a Storm Water Management Plan (SWMP) for the Project. The SWMP must identify potential construction and post-construction pollutants that may result from the Project and propose site design, source control, and treatment control Best Management Practices (BMPs) to address pollutants. In addition, the Project is subject to the new Municipal Stormwater Permit requirements regarding Low Impact Development (LID) that became effective on January 25, 2008. As stated in the Project's NOP, although it is not expected that the Project would cause additional or more severe impacts to hydrology or water quality than was addressed in the EOMSP Final EIR, these new studies must be completed and the resource issues addressed in this SEIR.

Compliance with County Water Quality Standards

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if any of the following would occur as a result of a Project-related component:

[1] Source: Project Clean Water, http://www.projectcleanwater.org/html/ws_tijuana.html

(1) The Project is a development project listed in County of San Diego Code of Regulatory Ordinances (Regulatory Ordinances), Section 67.804(g), as amended and does not comply with the standards set forth in the County Stormwater Manual, Regulatory Ordinances Section 67.813, as amended, or the Additional Requirements for Land Disturbance Activities set forth in Regulatory Ordinances, Section 67.811.

Threshold 1 is derived from the County of San Diego's "Guidelines for Determining Significance, Surface Water Quality" (July 30, 2007), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Surface Water Quality" (herein, "Water Quality Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This section addresses the Project's compliance with the WPO. Compliance with the WPO ensures that proposed development activities would be consistent with applicable State and Federal laws that protect water quality. An impact of a project would be considered significant if the design conflicts with one or more of the applicable standards presented in the County Stormwater Standards Manual or the Additional Requirements for Land Disturbance Activities. The additional requirements include preparation of a Stormwater Management Plan that specifies the way the BMPs required by the WPO will be implemented, and provides minimum BMPs, for the land disturbing activity.

Analysis

The Project proposes 23 developable industrial lots on a 79.6-acre site. Each lot has the potential to generate polluted runoff. Pollutants of concern generally associated with industrial uses include: sediment discharge due to pre- and post-construction areas left bare; heavy metals from vehicles; oil and grease from parking areas; trash and debris deposited in drain inlets; oxygen demanding substances; and organic compounds. Potential pollutants associated with industrial uses include nutrients and pesticides, both of which would be associated with on-site landscaping areas. All of these pollutants could potentially affect the quality of water runoff from the Project site.

The Project Major SWMP identifies control measures related to development of the Project, based on procedures identified in the County WPO, Stormwater Manual and Standard Urban Stormwater Mitigation Plan (SUSMP), as well as the related NPDES Municipal Stormwater Permit. The Project SWMP analysis is summarized below.

- Construction BMPs

Section 67.806.b of the WPO requires all applications for a permit or approval associated with a Land Disturbance Activity to be accompanied by a SWMP. The purpose of the SWMP is to describe how the project will minimize the short and long-term impacts on receiving water quality and to demonstrate compliance with the requirements set forth in the WPO. The proposed Project qualifies as a priority development project because it involves the development of an industrial operation greater than one acre in size, as specified in Section 67.802.w of the WPO. Projects that meet the criteria for a priority development project are required to prepare a Major SWMP.

The Project's SWMP has been prepared in accordance with the requirements for a Major SWMP, and identifies BMPs to be implemented during grading and construction in compliance with the State of California's NPDES Permit. Issued on February 14, 2011 by the RWQCB, the NPDES Permit requires the development and implementation of storm water regulations addressing storm water pollution from land development and construction activities associated with private and public

development projects. Project design measures in the form of BMPs that address water quality impacts from construction activities have been incorporated into the project, as detailed in the Project SWMP, included as Appendix J2 to this SEIR. As documented in this report, the Project would comply with the Statewide General NPDES Construction Permit by first filing a Notice of Intent (NOI) to the SWRCB, by implementing a Storm Water Pollution Prevention Plan (SWPPP) for site construction, and by implementing a monitoring program that includes a maintenance schedule with inspection of the construction BMPs before anticipated storm events and after actual storm events. Also, a qualified person would be assigned responsibility to ensure full compliance with the permit and to implement the elements of the SWPPP. Compliance with the General NPDES Permit and the SWMP would be required as a standard condition of Project approval.

In addition, the County's SUSMP addresses project design requirements, which are intended to address the WPO and the County's Jurisdictional Urban Runoff Management Plan (JURMP) requirements. The BMPs and the design criteria set forth in the SUSMP are based on existing well-established stormwater management technologies and practices. The Major SWMP prepared for the proposed Project incorporates the construction stormwater technologies recommended by the SUSMP, and was determined by the County DPW to be consistent with the design requirements specified therein.

Section 67.811 of the WPO establishes additional requirements for land disturbance activities and provides a list of BMPs to be installed, implemented, and maintained where applicable for a given project. The Project's Major SWMP incorporates 14 distinct BMPs to be incorporated during construction activities, and these BMPs are consistent with the list provided in Section 67.811 of the WPO. In addition, and as documented in the SWMP, the proposed Project site is not located within 200 feet of waters named on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation and/or turbidity. As such, the Project would not be required to implement Advanced Treatment BMPs. Therefore, the Project's SWMP is consistent with the requirements set forth in Section 67.811 of the WPO.

Finally, as part of the current NPDES Permit, the SWRCB requires that lead agencies must require LID BMPs, medium/high treatment control BMP effectiveness, and a Hydromodification Management Plan. LID is a required approach to reduce stormwater runoff rates and durations. The technique emphasizes mimicking natural hydrologic conditions through promotion of infiltration. The proposed Project has complied with this requirement through the preparation of a Hydromodification Management Plan (SEIR Appendix J3). For purposes of construction and post-construction activities, the Hydromodification Management Plan identifies a requirement to construct a detention basin on-site to reduce runoff peaks and durations to comply with flow control criteria. In addition, the Project would be required to direct runoff flows from streets to grass swales, which would enhance water quality by trapping pollutants, promoting infiltration, and reducing the flow velocity of stormwater runoff. Construction of these design features would occur concurrent with mass grading and site improvements. Therefore, the Project would be consistent with the NPDES Permit construction-level requirements to incorporate LID BMPs, to demonstrate medium/high treatment control effectiveness, and to enforce the LID requirements through adherence to a Project-specific Hydromodification Plan.

Therefore, because the proposed Project would be in compliance with the County's WPO and JURMP requirements, and because the Project would be consistent with the NPDES requirements for

LID during construction activities, a significant construction-related impact to water quality would not occur with implementation of the proposed Project.

- Treatment Control BMPs

The Project also would implement treatment control BMPs to treat runoff and maximize pollutant removal during long-term operation of the proposed Project. Treatment control BMPs are intended to reduce the amount of pollutants in storm water runoff leaving the Project site. As identified in the Project SWMP (see Appendix J2), extended/dry detention basins with grass/vegetated lining, vegetated swales, and a hydrodynamic separator system (cyclone separator) would be provided on-site as treatment control BMPs. Extended/dry detention basins detains runoff and allows particles and associated pollutants to settle out of the water column. Detention basins have one of the highest removal efficiencies for the pollutants anticipated by the Project and the pollutants identified on the 303(d) impaired water bodies list for the Tijuana River. The removal effectiveness of detention basins is low for pollutants that tend to be dissolved following treatment only; and high for coarse sediment, trash, and pollutants that tend to associate with fine particles during treatment. Vegetated swales would be utilized to capture roadway runoff from the public right-of-way via under sidewalk drains and will treat runoff within the private landscape setbacks. Vegetated swales have a low effectiveness for pollutants that tend to be dissolved following treatment; a medium effectiveness in the treatment of pollutants that tend to associate with fine particles during treatment; and a high effectiveness for treating coarse sediment and trash. Cyclone separators are designed to collect and contain sediment, debris, petroleum hydrocarbons (oil and greases) and bacteria. They perform as effective filtering devices at low flows but will not impede the system's maximum design flow. The removal effectiveness is low for pollutants that tend to be dissolved following treatment; low for pollutants that tend to associate with fine particles during treatment; and high for coarse sediment and trash.

The Project SWMP establishes a long-term maintenance program (including a funding mechanism) for the proposed treatment control BMPs. Compliance with the maintenance program would ensure that treatment control BMPs operate at maximum effectiveness during long-term operation of the Project to minimize the amount of polluted runoff leaving the site and the off-site improvement area. With implementation of the treatment control BMPs identified in the Project SWMP, the Project's Treatment Control BMPs would be consistent with the WPO, the standards set forth in the County Stormwater Manual, and the Additional Requirements for Land Disturbance Activities. Therefore, significant impacts to water quality and the degradation of beneficial uses would not occur.

- Source Control BMPs

Source control BMPs are intended to minimize potential sources of polluted runoff. Because the Project is at the mapping stage and specific uses have not been identified for any of the 23 proposed industrial lots on-site, the SWMP does not identify any source-control BMPs to be used on-site, other than measures for the proposed circulation system (*i.e.*, storm drain system stenciling and signage), common landscaped/revegetated areas (*i.e.*, the use of efficient irrigation systems and landscape design while minimizing the use of pesticides), restrictions on outdoor industrial processes, the provision of proper drainage for fire sprinkler test water, restrictions on roofing materials, and requirements for regular sweeping of plazas, sidewalks, and parking lots. It is intended that source control BMPs for each individual lot would be identified in a lot-specific SWMP, once specific development plans and uses have been identified for each respective lot. Implementation of the source control BMPs included in the lot-specific water quality management plans would ensure that

proposed land uses would not violate any waste discharge standards or degrade beneficial uses for receiving surface or groundwater resources. Preparation of SWMPs in association with future development proposals for individual lots is required pursuant to the County's WPO. During review of future development proposals, including future Site Plans, the County DPW would review the subsequent SWMPs to ensure that appropriate BMPs are incorporated into each lot so as to preclude significant water quality impacts and to verify compliance with the County's Stormwater Manual, WPO, and any applicable Additional Requirements for Land Disturbance Activities. Therefore, because the development of future lots would require the preparation and approval of individual SWMPs that demonstrate compliance with these requirements, impacts to water quality associated with long-term operation of individual lots would be less than significant.

Water Pollution

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if any of the following would occur as a result of a Project-related component:

(2) The Project will contribute pollution in excess of that allowed by applicable State or local water quality objectives or will cause or contribute to the degradation of beneficial uses.

Threshold 2 is derived from the County of San Diego's "Guidelines for Determining Significance, Surface Water Quality" (July 30, 2007), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Surface Water Quality" (herein, "Water Quality Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This threshold also was selected pursuant to State and local water quality objectives and beneficial uses. Water quality objectives are established for the reasonable protection of beneficial use and are derived from the RWQCB Basin Plans. In this particular guideline, the receiving water does not have to be officially recognized as a 303(d) impaired water body. An impact to water quality will be considered significant if a project will exceed a water quality objective or will degrade a beneficial use as defined in the respective basin plan.

Analysis

Water quality objectives for surface and subsurface waters are described in Chapter 3 of the Water Quality Control Plan for the San Diego Basin (9) (September 8, 1994 with amendments effective prior to April 25, 2007). The Basin Plan includes objectives applicable to general antidegradation; inland surface waters, enclosed bays and estuaries, coastal lagoons and ground waters; and ocean waters. The general antidegradation objective generally encourages that, regardless of existing water quality, new sources of runoff should not degrade downstream water quality. The remaining objectives provide specific guidance to acceptable levels of pollutant concentrations in the various types of surface and subsurface waters that occur throughout the San Diego Basin, with specific objectives tailored to the identified beneficial uses.

As noted above, a Project-specific SWMP has been prepared to identify BMPs to be incorporated into the proposed development so as to preclude significant water quality effects on receiving waters. The SWMP identifies appropriate pollution control measures based on the designated beneficial uses within the Tijuana Hydrologic Unit. As identified in the SWMP, pollutants of concern associated with the proposed Project include sediment, heavy metals, organic compounds, trash and debris,

oxygen demanding substances, and oil and grease. Based on the identified pollutants of concern, a series of BMPs were selected and incorporated into the various Project plans and/or will be required as conditions of approval for future implementing actions. As identified above under the discussion of Treatment Control BMPs, the Project has incorporated BMPs to address all of the identified pollutants of concern.

In addition, future implementing projects will be required to prepare subsequent SWMPs as required by the County's WPO. These future SWMPs will likewise be required to implement Treatment BMPs to address any anticipated pollutants of concern that may be associated with any specific uses identified for individual development lots.

Accordingly, with adherence to the Project's SWMP and future SWMPs to be prepared in association with each individual development lot, the Project would not contribute pollution in excess of that allowed by applicable State or local water quality objectives, and the Project would not cause or contribute to the degradation of beneficial uses. Therefore, impacts of Project development would have less than significant impacts to water quality.

Compliance with Clean Water Standards

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if any of the following would occur as a result of a Project-related component:

(3) The Project does not conform to applicable Federal, State or local "Clean Water" statutes or regulations including but not limited to the Federal Water Pollution Control Act, California Porter-Cologne Water Quality Control Act, and the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance.

Threshold 3 is derived from the County of San Diego's "Guidelines for Determining Significance, Surface Water Quality" (July 30, 2007), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Surface Water Quality" (herein, "Water Quality Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This threshold recognizes the three "Clean Water" regulations (one Federal, one State and one local) that establish water quality standards and waste discharge requirements to minimize impacts to water quality. Non-conformance with any of these regulations would degrade water quality and violate Federal, State and local laws. The impact would be considered significant.

Analysis

The three "Clean Water" regulations establish a set of laws intended to ensure the protection of beneficial uses of water resources and to generally prevent the degradation of water quality within receiving waters. The federal CWA strives to restore and maintain the chemical, physical, and biological integrity of the nation's water. The act sets up a system of water quality standards, discharge limitations, and permits. The fundamental purpose of this law is the protection of designated beneficial uses of water resources. Sections 106, 205(g), 205(j), 208, 303, and 305 of the Clean Water Act establish requirements for state water quality planning, management, and implementation with regard to surface waters. The Clean Water Act requires that states adopt water quality standards to protect public health, enhance the quality of water, and serve the purposes of the

Clean Water Act. The Clean Water Act was amended in 1987 to include urban and stormwater runoff, which required many cities to obtain a NPDES permit for stormwater conveyance system discharges. Section 402(p) of the Clean Water Act prohibits discharges of pollutants contained in stormwater runoff, except in compliance with an NPDES permit.

The Porter-Cologne Water Quality Control Act establishes the responsibilities and authorities of the nine RWQCBs and the SWRCB. The Porter-Cologne Act names these Boards and designates them as "... the principal State agencies with primary responsibility for the coordination and control of water quality" (Section 13001). Each Regional Board is directed to "...formulate and adopt water quality control plans for all areas within the region." A water quality control plan for the waters of an area is defined as having three components: 1) beneficial uses which are to be protected, 2) water quality objectives which protect those uses, and 3) an implementation plan which accomplishes those objectives (Section 13050). Therefore, the Porter-Cologne Act effectively serves as the statewide implementation mechanism for achieving the requirements of the federal CWA.

The County's WPO is intended, in part, to ensure that development projects throughout the County achieve the water quality objectives established by the SWRCB and to ensure compliance with the applicable NPDES Permit. The WPO contains discharge prohibitions, and requirements that vary depending on type of land use activity and location in the County. A SSM is included as Appendix A of the WPO and sets out in more detail, by project category, what Dischargers must do to comply with the WPO and to receive permits for projects and activities that are subject to the WPO. The WPO and SSM define the requirements that are legally enforceable by the County in the unincorporated area of San Diego County. In addition, the County has adopted its Standard SUSMP for Land Development and Public Improvement Projects. The SUSMP is focused on project design requirements and related post-construction requirements for land development and capital improvement projects, and addresses WPO requirements for these project types.

In effect, the County's WPO serves to implement the Porter-Cologne Act, which in turn was adopted to ensure statewide compliance with the CWA. Thus, compliance with the Porter-Cologne Act ensures compliance with the CWA, while compliance with the County's WPO helps demonstrate consistency with the RWQCB and SWRCB policies, objectives, and requirements.

As noted above under the discussions of Compliance with County Water Standards and Water Pollution (see Threshold 1), the proposed Project would comply with the requirements set forth in the WPO. In addition, the Project would comply with the Statewide General NPDES Construction Permit, including the recently added construction-level requirements to incorporate LID BMPs, to demonstrate medium/high treatment control effectiveness, and to enforce the LID requirements through adherence to a Project-specific Hydromodification Plan. The Project also would comply with applicable provisions from the Water Quality Control Plan for the San Diego Basin (as discussed above under Threshold 2). Future implementing projects, including future site plans for the development of individual lots, would be required by the WPO to prepare individual SWMPs to demonstrate compliance with the federal CWA as well as the requirements of the SWRCB and the WPO. Therefore, the proposed Project would conform to applicable Federal, State, and local "Clean Water" statutes or regulations, and a significant impact would not occur.

Impaired Waters

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if the following would occur as a result of a Project-related component:

(4) The Project would drain to a tributary of an impaired water body listed on the Clean Water Act Section 303(d) list, and will contribute substantial additional pollutant(s) for which the receiving water body is already impaired.

Threshold 4 is derived from the County of San Diego's "Guidelines for Determining Significance, Surface Water Quality" (July 30, 2007), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Surface Water Quality" (herein, "Water Quality Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This threshold also was selected in order to assess the potential of the proposed Project to degrade polluted water bodies. Section 303(d) of the Federal Clean Water Act (CWA, 33 USC 1250, et seq., at 1313(d)), requires states to identify waters that are already polluted (i.e. "impaired" water bodies). Impacts to impaired water bodies as defined by the CWA would result in adverse water quality conditions and mitigation would be required.

Analysis

Section 303(d) of the federal Clean Water Act (CWA, 33 USC 1250, et seq., at 1313(d)), requires States to identify waters that do not meet water quality standards ("impaired" water bodies). According to the California 303(d) list published by the San Diego Regional Water Quality Control Board in 2006, three bodies of water downstream of the Project site are listed as impaired: Tijuana River (approximately 6.8 miles west of the Project site), Tijuana River Estuary (approximately 8.4 miles west of the Project site), and Pacific Ocean Shoreline at the mouth of the Tijuana River (approximately 12.0 miles west of the Project site). The Tijuana River is identified as being impaired due to eutrophic conditions, indicator bacteria, low dissolved oxygen, pesticides, solids, synthetic organics, trace elements, and trash. The Tijuana River Estuary is identified as being impaired due to eutrophic conditions, indicator bacteria, lead, low dissolved oxygen, nickel, pesticides, thallium, trash, and turbidity. The Pacific Ocean Shoreline is impaired by bacteria only.

According to the Project-specific SWMP, industrial developments are generally associated with the following pollutant types: sediments, heavy metals, organic compounds, trash and debris, oxygen demanding substances, and oil and grease. Industrial developments, such as the proposed Project, are not typically associated with pollutants such as bacteria and pesticides; therefore, the proposed Project would not substantially contribute these pollutants to the three downstream impaired water bodies. The Pacific Ocean Shoreline is impaired only by bacteria; therefore, runoff from the proposed Project would not contribute substantial pollutants of concern to this impaired water body, and impacts would be less than significant.

The proposed Project has the potential to contribute to existing water quality impairments at the Tijuana River and Tijuana River Estuary because Project runoff could contribute to eutrophic conditions, low dissolved oxygen, solids, synthetic organics, trace elements, and trash. As documented in the Project's SWMP, BMPs have been proposed to ensure treatment of Project runoff to remove pollutants of concern prior to discharge of runoff from the site. Three types of BMPs are

proposed: extended/dry detention basins with grass/vegetated lining, vegetated swales, and a hydrodynamic separator system (cyclone separator). Table 3.1.2-1, *Project BMP Treatment Effectiveness,* provides a summary of the treatment effectiveness of the Project's BMPs with respect to the pollutants of concern within the Tijuana River and Tijuana River Estuary. As shown, the Project would implement BMPs that would treat all Project-related runoff to remove the pollutants of concern to varying degrees. The BMPs, combined, would assure that the Project does not contribute substantial additional pollutants to these impaired water bodies. As such, the proposed Project's impact to impaired waters is evaluated as less than significant.

In addition, future implementing projects, such as individual site plans, would be required by the WPO to prepare and implement a SWMP to address any operational pollutants of concern that may be generated by future end users. Similar to the proposed Project, these future implementing projects would be required to identify all pollutants of concern and implement BMPs to ensure that those pollutants are adequately treated prior to discharge from the site. Because the preparation and implementation of a site-specific SWMP would be required pursuant to the WPO, future implementing projects would not contribute substantial additional pollutants to downstream impaired water bodies, and impacts would be less than significant.

Table 3.1.2-1 PROJECT BMP TREATMENT EFFECTIVENESS

POLLUTANTS OF CONCERN	PROJECT BMPS		
	Settling Basins (Dry Ponds)	**Hydro-dynamic Devices**	**Vegetated Swales**
Course Sediment and Trash	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	Low	Medium
Pollutants that tend to be dissolved following treatment	Low	Low	Low

Drinking Water Reservoirs

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if the following would occur as a result of a Project-related component:

(5) The Project would drain to a tributary of a drinking water reservoir and will contribute substantially more pollutant(s) than would normally runoff from the Project site under natural conditions.

Threshold 5 is derived from the County of San Diego's "Guidelines for Determining Significance, Surface Water Quality" (July 30, 2007), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Surface Water Quality" (herein, "Water Quality Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This threshold evaluates the Project's potential to adversely affect local drinking water by increasing pollution above what would normally occur in runoff under natural conditions.

Analysis

Municipal and domestic water supply (*i.e.*, drinking water) is not an identified beneficial use of surface waters within the Project's hydrologic unit. The Project site does not drain into any tributaries of drinking water reservoirs, as there are no drinking water reservoirs within the Tijuana Hydrologic Unit between the Project site and the Pacific Ocean. Accordingly, surface runoff from the site has no potential to contribute polluted runoff to a tributary of a drinking water reservoir, and significant impacts to drinking water reservoirs would not occur.

Erosion

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if the following would occur as a result of a Project-related component:

(6) The Project would substantially alter the drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.

Threshold 6 is derived from the County of San Diego's "Guidelines for Determining Significance, Hydrology" (July 30, 2007), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Hydrology" (herein, "Hydrology Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This threshold also was selected for evaluation in order to assess the potential of the proposed Project to impact on- off-site drainage patterns or directions. Alteration of drainage patterns and modifications to drainage courses could disturb development (*i.e.*, housing foundations, roads, trails and utilities) and natural features, (*i.e.*, watercourses) thereby creating potentially significant impacts to natural and developed conditions.

Analysis

Under existing conditions, off-site flows originating from the north enter the site at three main inflow points along future Airway Road. These flows are conveyed through the site via natural swales that convey the flows into Mexico via six 7' wide by 4' high box culverts. A portion of these flows outflow near the eastern boundary of the site along future Alta Road, but eventually confluence into the same box culverts at the border.

As depicted on Figure 3.1.2-2, *Proposed Conditions Hydrology Map*, the proposed Project would collect off-site drainage at three distinct locations along the northern Project boundary (see Nodes 1000, 1010, and 1020 on Figure 3.1.2-2). Off-site flows will be conveyed in an underground drainage system in Airway Road, Siempre Viva Road, and Alta Road, and would bypass the on-site drainage system to avoid mixing existing off-site flows with runoff from the Project site. Curb inlets and desilt basins would be used to capture on-site flows which would be routed towards the proposed detention basin within Lot 23. The detention basin would be used to detain the developed flows to ensure the flow rate does not exceed what occurs under existing conditions. The detained flows will be released offsite to the south maintaining the original drainage flow path and avoiding the diversion of flows. A rip-rap energy dissipater would be provided at the discharge point to reduce the velocity of on-site runoff discharge and minimize the potential for erosion.

Grading and construction of the Project site would result in alterations to the site's internal drainage patterns; however, the proposed Project has been designed to avoid the diversion of flows and would preserve the existing, natural points of discharge. As described in SEIR Section 1.2.1.1, *Tentative Map (TM5566) – Drainage Plan*, the existing drainage courses from the north of the Project site would be re-routed and captured by a system of curb inlets and desilting basins. These BMPs would reduce the amount of sedimentation within on-site runoff flows before transferring the flows to a series of underground drainage systems, and ultimately, the detention basin within Lot 23. The detention basin would temporarily detain runoff flows on-site, thereby reducing sedimentation, and would then discharge runoff to the south of the site in a manner that closely resembles existing flow conditions to minimize erosion. Rip-rap energy dissipaters would be provided at the discharge point of the detention basin to reduce the velocity of runoff discharge, which would further minimize the potential for erosion.

Although the Project would re-route on-site flows through an underground drainage system, the Project would not modify the overall drainage pattern of the site or the adjacent tributary areas, as runoff flows would continue to leave the property at locations consistent with the existing points of discharge. In addition, rip-rap energy dissipaters would be provided to further reduce the potential for erosion. Thus implementation of the proposed Project would not result in substantial increased erosion or siltation on- or off-site, and a significant impact would not occur.

Flood Hazards

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if any of the following would occur as a result of a Project-related component:

(7) The Project will increase water surface elevation in a watercourse within a watershed equal or greater than 1 square mile, by 1 foot or more in height and in the case of the San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River and Otay River, 1/5 of a foot or more in height.

(8) The Project will result in increased velocities and peak flow rates exiting the Project site that would cause flooding downstream or exceed the stormwater drainage system capacity serving the site.

Threshold 7 is derived from the County of San Diego's "Guidelines for Determining Significance, Hydrology" (July 30, 2007), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Hydrology" (herein, "Hydrology Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This threshold also was selected to address CEQA Guidelines, Appendix G, Section VIII, which requires an analysis of the alteration of drainage patterns from landform alteration as well as increased in the rate or amount of runoff when evaluating impacts to hydrology and water quality.

Threshold 8 also is derived from the Hydrology Guidelines, and is evaluated to ensure that adequate storm water facilities would be available to serve the proposed Project. The County has a Design and Procedure Manual with requirements to ensure that storm drains would be of sufficient size and

placed in the proper locations to accommodate storm water flows. Non-compliance with County requirements could result in adverse storm water conditions.

Analysis

Implementation of the Project would ultimately result in the construction of additional impervious surfaces, including pavement and structures. The addition of such surfaces has the potential to increase both the total amount of runoff within the Project site and the velocity of runoff discharged from the site, which could result in flooding on- or off-site.

As part of the Drainage Report prepared for the Project (see Appendix J1 to this SEIR), the quantity of stormwater runoff from the Project's developed condition associated with a 100-year design storm event was calculated. In order to determine the potential for an increase in runoff from the Project site, the study compared runoff quantities from the site in its current, undeveloped condition to the runoff quantities associated with ultimate proposed development. As depicted in Table 3.1.2-2, *Pre- and Post-Development 100-Year Storm Flows*, development of the Project would increase peak runoff flows as compared to existing conditions. Ultimate development associated with the Project would increase runoff by approximately 659-percent (346.2 cfs), which would represent a substantial increase in runoff volumes.

Table 3.1.2-2 PRE- AND POST-DEVELOPMENT 100-YEAR STORM FLOWS

BASIN	PRE-DEVELOPMENT (CFS)[1]	POST-DEVELOPMENT (CFS)	PEAK DETENTION VOLUME (AC-FT)[2]	POST DEVELOPMENT W/ DETENTION BASIN (CFS)
Lot 23	61.9	408.1	15.4	46.9

[1]cfs = cubic feet per second.
[2]ac-ft = acre-feet.
Sources: Kimley Horn and Associates (November 30, 2011).

As described in EIR Section 1.2.1.1, *Tentative Map (TM5566) – Drainage Plan*, a detention basin have been incorporated into the design of the Project in order to attenuate increase to runoff volumes on-site. The detention basin was designed to meet the County of San Diego Hydromodification requirements. The detention basin would be adequately sized to capture all runoff from the site, and would incorporate low flow, intermediate orifices and weirs to control the rate and amount of outflow discharged from the site, as well as emergency spillways to ensure that 100-year storm peak flows are routed completely to the detention basin. The proposed detention basin would have a footprint of approximately 2.47 acres and would have a top embankment of 10.1 feet above the bottom of the basin, which would provide a freeboard of 1.0 feet above the maximum 100-year stage (*i.e.*, 9.1 feet). As depicted in Table 3.1.2-2, the detention basin would reduce peak flows during a 100-year storm event below the existing conditions flow rate. Accordingly, implementation of the Project would not increase the total rate or amount of storm flows leaving the site. As such, the proposed Project would not substantially increase flood hazards on- or off-site and impacts would be less than significant.

100-Year Floodplains and Special Flood Hazard Area Safety

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if any of the following would occur as a result of a Project-related component:

(9) The Project will result in placing housing, habitable structures, or unanchored impediments to flow in a 100-year floodplain area or other special flood hazard area, as shown on a FIRM, a County Flood Plain Map or County Alluvial Fan Map, which would subsequently endanger health, safety and property due to flooding.

Threshold 9 is derived from the County of San Diego's "Guidelines for Determining Significance, Hydrology" (July 30, 2007), which is available for review at the County of San Diego Department of Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Hydrology" (herein, "Hydrology Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This threshold also was selected to address question g) and i) in the CEQA Guidelines, Appendix G, VIII, the County RPO and the Flood Damage Prevention Ordinance which prohibit the placement of housing or habitable structures in a 100-year floodplain area or other special flood hazard area, as shown on a FIRM, or other flood hazard delineation map which would subsequently endanger health, safety and property due to flooding. Flooding includes mudflows and debris flows.

Analysis

The Project site is not located within a 100-year floodplain, is not located in any special flood hazard areas, and is not located within any floodways, according to mapping information available from the San Diego Geographic Information Source (SanGIS). Because the Project site is not located within any 100-year floodplains, floodways, or any special flood hazard areas, no structures would be placed in a location where they would impede or redirect flood flows in a manner that could endanger health, safety, or property due to flooding; therefore, a significant impact would not occur.

Flood Hazard Areas and Floodway Alteration

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on hydrology and water quality if any of the following would occur as a result of a Project-related component:

(10) The Project will place structures within a 100-year flood hazard area or alter the floodway in a manner that would redirect or impede flows resulting in any of the following:

a. Alter the Lines of Inundation resulting in the placement of other housing in a 100-year flood hazard;

OR

b. Increase water surface elevation in a watercourse with a watershed equal to or greater than 1 square mile by 1 foot or more in height and in the case of the San Luis Rey River, San Dieguito River, Sweetwater River, and Otay River 1/5 of a foot or more in height.

Threshold 10 is derived from the County of San Diego's "Guidelines for Determining Significance, Hydrology" (July 30, 2007), which is available for review at the County of San Diego Department of

Planning and Development Services, 5510 Overland Avenue, 3rd Floor, San Diego, CA 92123. The "Guidelines for Determining Significance, Hydrology" (herein, "Hydrology Guidelines") are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. This threshold also was selected to assess the potential of the proposed Project to impair or alter floodways. This significance guideline has been developed to address question h) in the CEQA Guidelines, Appendix G, VIII, the County RPO and the Flood Damage Prevention Ordinance which prohibit activities or placement of structures in a 100-year floodplain area or other special flood hazard area, as shown on a FIRM, or other flood hazard delineation map which would subsequently endanger health, safety and property due to an increase in flood levels during the occurrence of a base flood discharge.

Analysis

The Project site is not located within a portion of the County that is a tributary to the San Luis Rey River, San Dieguito River, Sweetwater River, or Otay River, and would therefore have no impact on surface elevations associated with these tributaries. As described under the analysis of Thresholds 7 and 8, detention basins have been incorporated into the proposed development and would reduce flows from the site as compared to existing conditions, thereby demonstrating that Project implementation would not increase flood inundation hazards for downstream properties. Additionally, the proposed Project would not divert any flows and would therefore have no adverse effects on downstream lines of inundation. Therefore, a significant impact associated with downstream 100-year flood hazards would not occur with implementation of the proposed Project.

3.1.2.3 Cumulative Impact Analysis

Cumulative Impacts Identified by the EOMSP Final EIR

The EOMSP Final EIR (1994) did not identify or disclose any cumulatively significant impacts to hydrology and water quality.

Project-Specific Cumulative Impact Analysis

A study area was defined in order to assess the cumulative effect of the Project's impacts to hydrology and water quality. In defining the study area, the primary consideration was local topography, as it directly influences the drainage characteristics of an area. The resulting study area encompassed approximately 170 acres of the Otay Mesa community, which includes all lands located upstream that would flow through the proposed Project site with implementation of the proposed Project. Downstream lands are not included within the cumulative study area because runoff from the proposed Project site would discharge immediately into several existing manmade drainage channels located immediately south of the Project site and drainage flows would be conveyed by a series of culverts and drainage channels before ultimately combining with the Tijuana River. Figure 3.1.2-3, *Cumulative Study Area – Hydrology and Water Quality*, depicts the cumulative study area.

Research was conducted which resulted in a list of 13 past, present, and reasonably foreseeable projects within the study area, and to determine the potential for cumulative water quality impacts. EIR Section 1.7 provides a summary of all the projects that were considered along with their identified impacts to each of the environmental issue areas addressed by this EIR. As identified in EIR Table 1-7, *Cumulative Projects CEQA Summary*, none of the projects within the cumulative study area were identified as having significant impacts to hydrology and water quality, although all projects in the study area have the potential to contribute to cumulative impacts to hydrology and/or water quality. These projects would be required to implement construction and long-term BMPs to

provide water quality treatment of runoff discharged from the respective project sites, and attenuate any changes to the hydrologic response of the project site, as required through compliance with WPO. Upon incorporation of required WPO BMPs, all projects in the hydrology and water quality cumulative study area for the Otay Business Park project would reduce their potential adverse impacts to water quality to below a level of significance.

As noted throughout this Section, the proposed Project would incorporate a number of design features to preclude significant hydrology and water quality impacts. The Project has incorporated BMPs for construction and long-term operation to ensure that the Project does not conflict with the WPO. Because the Project would adhere to all applicable provisions of the WPO, there is no potential for cumulatively significant impacts due to a conflict with the WPO.

With respect to water pollution, the proposed Project would incorporate a number of Treatment Control BMPs to ensure that runoff from the proposed Project does not contribute pollution in excess of water quality objectives or contribute to the degradation of beneficial uses. As described previously in this section, the Treatment Control BMPs will address all pollutants of concern for industrial developments, and will ensure that the Project does not contribute to existing impairments of the Tijuana River watershed. Since all upstream waters would flow through the Project's proposed Treatment Control BMPs, and because any new upstream developments would similarly be required by the County's WPO to incorporate Treatment Control BMPs, the Project would not contribute to a significant cumulative water quality impact within the Tijuana Watershed.

In addition, and as described above, the proposed Project would not conflict with any Federal, State, or local "Clean Water" statutes or regulations. As discussed under Threshold 1, the proposed Project would comply with the requirements set forth in the WPO. In addition, the Project would comply with the Statewide General NPDES Construction Permit, including the recently added construction-level requirements to incorporate LID BMPs, to demonstrate medium/high treatment control effectiveness, and to enforce the LID requirements through adherence to a Project-specific Hydromodification Plan. The Project also would comply with applicable provisions from the Water Quality Control Plan for the San Diego Basin (as discussed above under Threshold 2). Future implementing projects, including future site plans for the development of individual lots, would be required by the WPO to prepare individual SWMPs to demonstrate compliance with the federal CWA as well as the requirements of the SWRCB and the WPO. Compliance with applicable Federal, State, and local "Clean Water" statutes and regulations, which were implemented to address water quality concerns on a regional scale, would ensure that cumulative impacts to water quality do not result from Project implementation.

As noted previously under the discussion of Threshold 4, the Project would not contribute substantial pollutants to the Tijuana River, including those pollutants for which the Tijuana River tributaries are identified as impaired by the CWA Section 303(d) list. Treatment Control BMPs have been incorporated into the proposed Project, and include detention basins, vegetated swales, and catch basin inserts. These BMPs were specifically selected to address the pollutants of concern that are expected from the development of the project site. Because the Project site intercepts runoff flows from upstream properties under existing conditions, Treatment Control BMPs proposed on-site and within improved portions of off-site roadways also would provide a secondary benefit of treating captured runoff flows generated upstream. With the incorporation of these BMP devices, Project runoff along with runoff from upstream properties would not substantially contribute to the existing water quality problems identified in the Tijuana River and Tijuana River Estuary. Therefore,

cumulatively significant impacts to existing impaired waters would not occur with implementation of the Project.

As noted under the discussion of Threshold 5, the Project site does not drain into any tributaries of drinking water reservoirs, as there are no drinking water reservoirs within the Tijuana Hydrologic Unit between the Project site and the Pacific Ocean. Therefore, there is no potential for cumulatively significant impacts to drinking water reservoirs.

The proposed Project would not substantially alter discharge points that occur under existing conditions, and would therefore not substantially alter the drainage pattern of the site or area. Since the Project would not contribute to any such alterations, there is no potential for cumulatively significant impacts associated with erosion.

The proposed detention basin would ensure that peak flows from the site are not increased with Project implementation, thereby precluding any potential flood hazard effects downstream. Because the Project would result in a reduction of peak discharge rates for the site, there is no potential for cumulatively significant impacts associated with flood hazards to downstream properties. Similarly, the Project site is not located within a floodplain, floodway, or other special hazard area, and would therefore not contribute to any safety hazards associated with such features.

Finally, the proposed Project would reduce peak flows from the site and would not divert any flows, and would therefore have no potential to cumulatively contribute to changes to existing flood patterns which could result in the placement of housing within the 100-year flood hazard area.

3.1.2.4 Significance of Impacts Prior to Mitigation

As documented in the preceding sections, implementation of the proposed Project would not result in any significant impacts to hydrology or water quality.

3.1.2.5 Mitigation

Mitigation Measures from the EOMSP Final EIR

Mitigation measures were identified by the EOMSP Final EIR (1994) to address impacts to hydrology and water quality resulting from construction and long-term operation of the uses identified by the EOMSP, and include the following:

6A. As individual projects are proposed, they shall be required to construct on-site detention facilities, storm drain facilities, energy dissipators, and erosion control devices to reduce the flow of runoff.

6B. The County and the property owners shall comply with Best Management Practices of the Clean Water Act.

6C. Individual projects shall incorporate proper construction techniques to prevent erosion and off-site transport of sediment.

6D. Bridge construction across O'Neal Canyon shall be completed outside the 100-year floodplain.

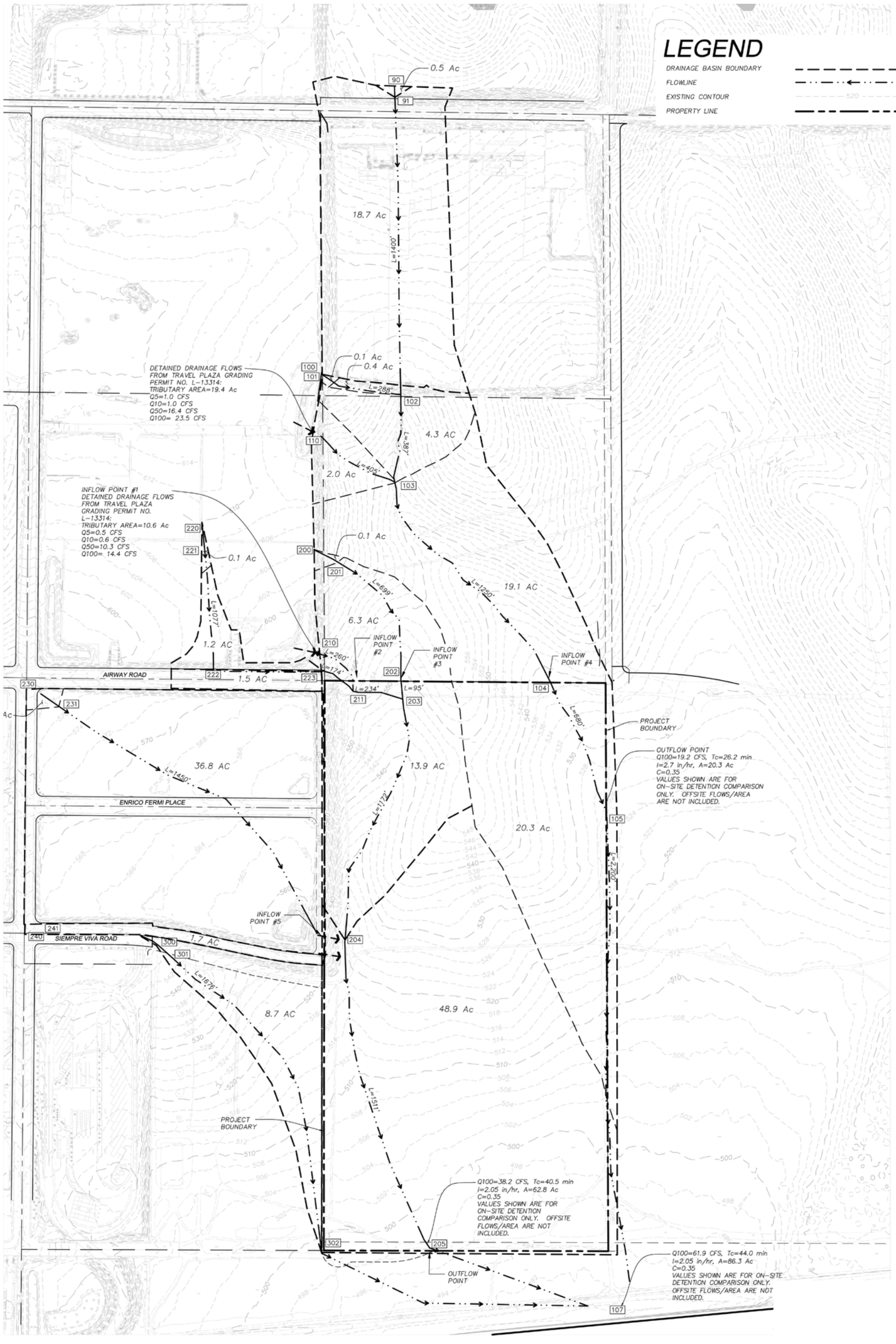
Mitigation Measure 6A would be implemented with the current TM5566, which proposes to install appropriate on-site detention facilities, storm drain facilities, energy dissipaters, and other erosion control devices as necessary to reduce the flow of runoff. Mitigation Measure 6B also would be implemented as part of the proposed Project because appropriate BMP features have been included in the design (as described above in Section 3.1.2.2). Additionally, future implementing projects would be required to implement additional BMPs if necessary to demonstrate compliance with the County's WPO. Similarly, Mitigation Measure 6C would be implemented as part of the proposed Project because the Project's design includes appropriate drainage devices to prevent erosion and reduce the potential for off-site transport of sediment. Future implementing projects also may be required to identify additional measures if necessary to demonstrate compliance with the County's WPO. Mitigation Measure 6D would not apply to the proposed Project because the portion of Alta Road which crosses O'Neal Canyon was previously constructed in association with the George F. Bailey County Correctional Facility, and because the Project does not propose to take access from this portion of Alta Road.

Project-Specific Mitigation

Based on the analysis contained within this sub-chapter, it has been determined that implementation of the proposed Project would not require any Project-specific mitigation measures because significant impacts would not occur because the project will implement BMPs as required through compliance with the WPO.

3.1.2.6 Conclusion

As indicated in the above analysis, the proposed Project would comply with all local, state, and federal regulations pertaining to hydrology and water quality and no significant impact would occur. The Project has been designed to comply with the County's WPO, which was adopted in part to ensure that all projects within the County comply with appropriate state and federal laws regulating runoff and water quality. These provisions also would ensure that the Project would not result in substantial erosion and would not substantially alter the drainage patterns of the site or surrounding areas. Finally, the Project would not create any flood hazards to downstream properties and is not located in a portion of the County that is subject to significant flood hazards. Based on the analysis contained in this section, it is concluded that the proposed Project would not result in any significant direct or cumulative impacts to hydrology or water quality.

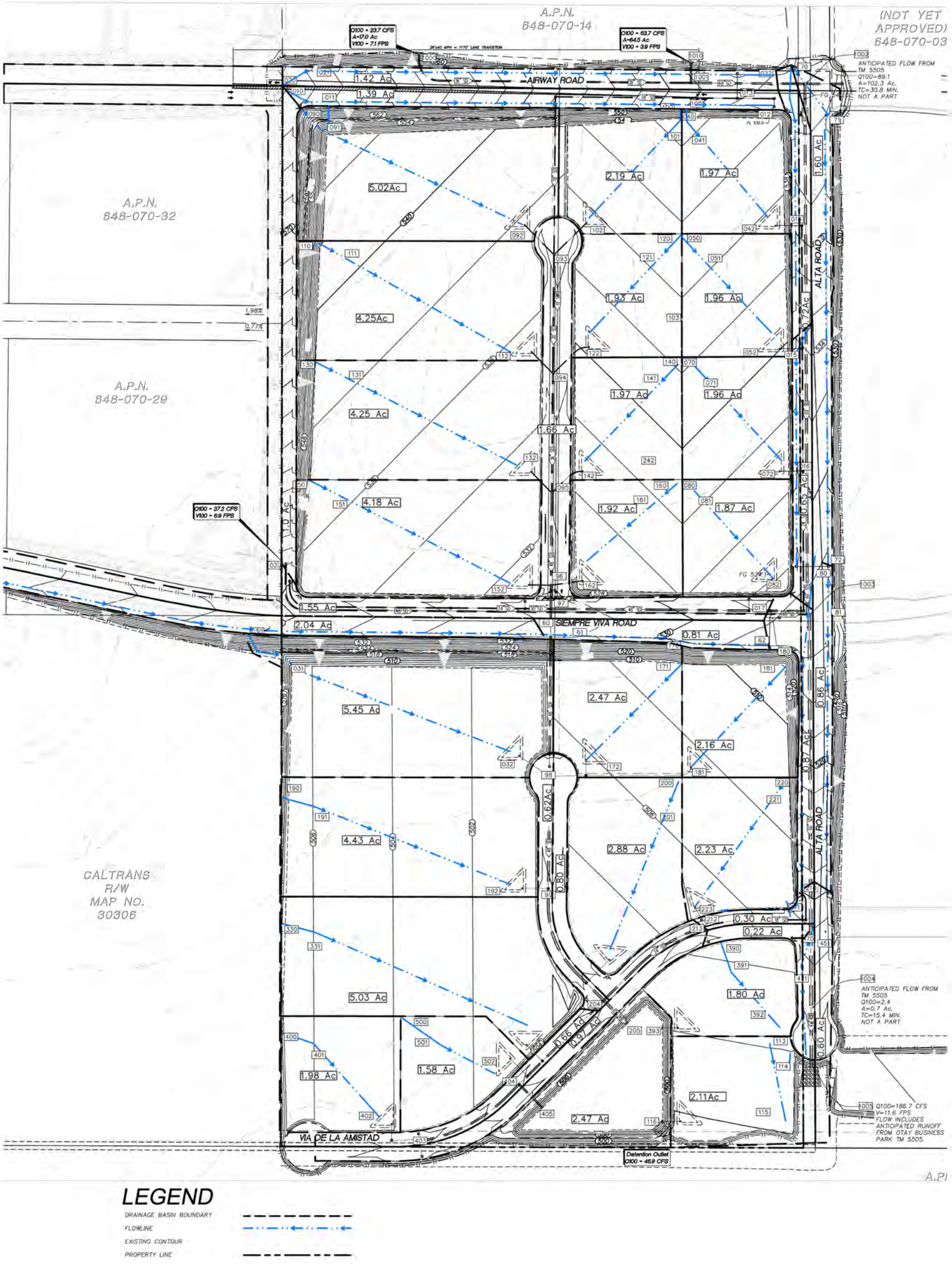


Source: Kimley-Horn and Associates (11-2011)

FIGURE 3.1.2-1

not to scale

Existing Conditions Hydrology Map

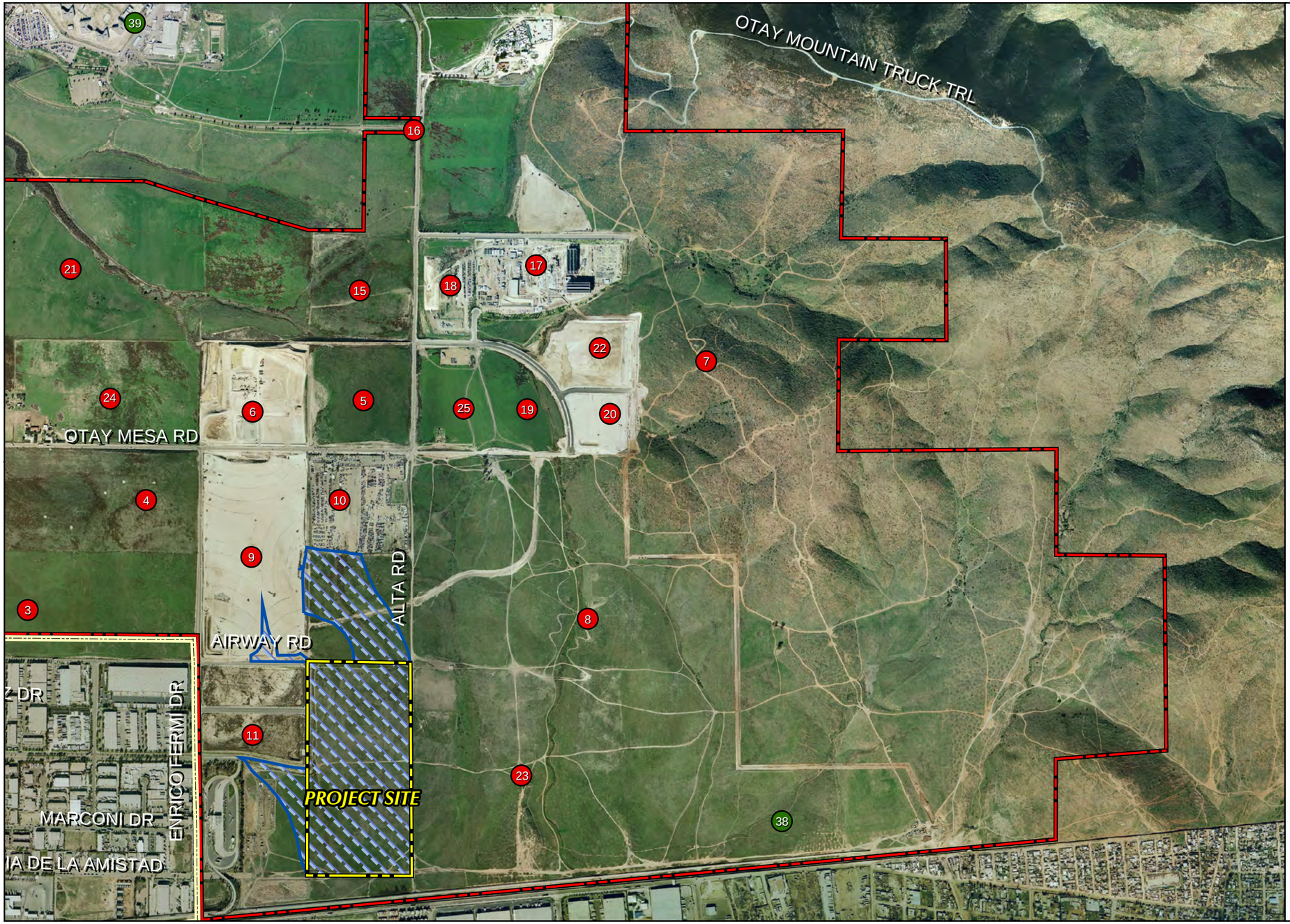


Source: Kimley-Horn and Associates (09-2012)

FIGURE 3.1.2-2

not to scale

Proposed Conditions Hydrology Map



CUMULATIVE PROJECTS

County of San Diego Projects

- 3. Airway Business Center/FedEx
- 4. Enrico Fermi Industrial Park
- 5. East Otay Auto Storage
- 6. East Otay Auto Transfer
- 7. Otay Hills Quarry
- 8. Otay Crossings Commerce Park
- 9. Otay Mesa Travel Plaza
- 10. East Otay Temporary Fire Facility
- 11. Burke Minor Subdivision
- 15. CCA San Diego Correctional Facility
- 16. National Enterprises Auto Storage/Recycling
- 17. Otay Mesa Generating Project
- 18. Power Plant Laydown Site
- 19. Paseo De La Fuente
- 20. Vulcan Site Grading Plan
- 21. Vulcan Batching Plant
- 22. International Industrial Park
- 23. Otay Business Park
- 24. Ragabo Otay Technology Park
- 25. OMC Properties Subdivision

Other Projects

- 38. SR-11 and Otay Mesa East Port of Entry
- 39. CA Health Care Facility, R. J. Donovan Correctional Facility

East Otay Mesa Specific Plan

Watershed Impacting Project Site

0 0.25 0.5 *Miles*

FIGURE 3.1.2-3

Cumulative Study Area - Hydrology and Water Quality

3.1.3 Public Services

The previously certified EIR for the EOMSP identified significant and mitigable impacts to Public Services and Utilities. For the purposes of analysis in this SEIR, public services are defined as fire protection, police protection, public schools, and public libraries; and are discussed below. Utilities and service systems are defined as water, sewer, and stormwater. Project impacts to utilities and service systems are discussed in Section 3.1.4 of this SEIR.

3.1.3.1 Existing Conditions

Fire Protection Services

Fire protection services to the Project site are provided by the San Diego Rural Fire Protection District (RFPD). Fire protection service would be provided by Interim Station 22 at Bailey Prison on the north end of Alta Road, which is located approximately 3.4 roadway miles from the site (with completion of roadway improvements proposed by the Project). The estimated response time to the site is five (5) minutes. In addition, the RFPD Engine Company at Donovan Prison can also respond. Response also is available, via an Automatic Aid agreement, from the Chula Vista Fire Department (CVFD). CVFD Station 7's Engine Company and Truck Company are located approximately 7 roadway miles from the site (via SR 125), reflecting a response time of approximately 10 minutes. An engine company from the San Diego City Fire Department station, located at Brown Field, also could respond via an automatic aid agreement, and a San Diego City Fire Department ladder truck is located approximately six miles from the site. A future, permanent fire station is planned within the EOMSP area, although it is unknown when this facility will be available to serve the area.

The first alarm response to the Project area would include two engine companies and a Chief Officer. Two engine companies and a Chief Officer also would respond to vegetation fires in the area. For a hazardous materials event, the response would include the County Hazardous Materials response team and other Fire Agency resources as requested by the Incident Commander. In addition, numerous other resources are available upon request through the County Mutual Aid system and from CALFIRE statewide.

Police Protection Services

The San Diego County Sheriff's Department provides police protection services for the Project area. Police protection services for the East Otay Mesa community are currently provided from the San Diego County Sheriff's Department Imperial Beach Station. The Imperial Beach Station is located at 845 Imperial Beach Boulevard, in the City of Imperial Beach, approximately 11.3 miles northwest of the Project site. The Imperial Beach Station serves a population of approximately 50,000 people, with approximately 44 sworn law enforcement personnel.

Specifically, the Project site is located within Beat #726 of the Sheriff's service area, which also includes the unincorporated communities of Bonita, Sunnyside, Lincoln Acres, Proctor Valley, San Miguel Mountain, Otay Valley and Otay Mesa. Two deputy positions per shift are assigned to patrol Beat #726.

In order to meet the Sheriff Department's response time standard per the General Plan Public Facility Element (PFE) (i.e., eight minutes for priority calls and 16 minutes for non-priority calls), a new temporary sheriff substation (East Otay Mesa Substation) was constructed and occupied at the

intersection of Otay Mesa Road and Enrico Fermi Drive in October 2009. Although this temporary substation currently achieves the PFE standard within the Project area, the Sheriff's Department has indicated that with development of the land uses in East Otay Mesa, a permanent facility ultimately would be required to ensure that the area would continue to meet the PFE response time standard under long-term conditions. In order to meet this need, a permanent 6,000 s.f. Sheriff's substation is planned to be co-located with a future 8,000 s.f. fire station at the northwestern corner of the intersection of Otay Mesa Road and Enrico Fermi Drive. Timing for construction of the permanent substation will be determined by the Sheriff's Department based on need within the area (i.e., based on the pace of development within the area), and the substation is currently anticipated to be warranted sometime between October 2014 and October 2019. Funding for the permanent substation would occur as part of a community facilities district (CFD 09-1) that would levy fees on developing properties within East Otay Mesa.

Public Schools

The Project site is located within the service boundaries of the San Ysidro Elementary School District and the Sweetwater Union High School District.

Libraries

The Project site is located within the San Diego County Public Library service area; however, there are no San Diego County branch libraries within the vicinity of the Project site. There are two City of San Diego public library branches located in the vicinity of Project site and eligible to serve the Project site: the San Ysidro Branch Library and the Otay Mesa Branch Library. The San Ysidro Branch Library is located approximately seven miles west of the site at 101 West San Ysidro Boulevard, in the City of San Diego, and the Otay Mesa Branch Library is located approximately nine miles northwest of the site at 3003 Coronado Avenue, in the City of San Diego.

3.1.3.2 Analysis of Project Effects and Determination as to Significance

East Otay Mesa Specific Plan Final EIR

The Final EIR for the EOMSP concluded that implementation of the EOMSP would result in significant but mitigable impacts to public services. Specifically, the EOMSP Final EIR indicates that implementation of the EOMSP would generate new demand for fire protection and emergency services that did not exist at the time. However, the Final EIR also concluded that development within the EOMSP would not be allowed until appropriate temporary or permanent facilities are constructed and operational; as such, impacts were described as less than significant.

The EOMSP also indicated that implementation of the EOMSP would generate additional demand for police protection services in an area that did not, at the time, meet acceptable standards. However, as with fire protection services, such impacts were evaluated as less than significant because the Specific Plan does not allow for development until adequate services are available.

The EOMSP EIR also disclosed potential impacts to the issue areas of "Schools," "Libraries," and "Parks and Recreation." However, as the current Project does not propose any residential uses, the analysis within these sections does not pertain to the proposed Project.

Since approval of the EOMSP in 1994, there have been a number of changes to the planned and/or operational public services within the EOMSP area. The proposed Project site has since been annexed into the Rural Fire Protection District (LAFCO, June 23, 2008). Although the EOMSP includes a future Sheriff's Station site to serve the area, to date no permanent facility has been constructed. Based on these changed circumstances, the County of San Diego has determined that a supplemental analysis of potential public services impacts is necessary to adequately identify, disclose, and mitigate for impacts that could result from Project implementation.

Public Service Impacts

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on public services if the following would occur as a result of a Project-related component:

(1) The proposed project would result in one or more substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could result in significant environmental impacts, in order in order to maintain acceptable service ratios, response times or other performance objectives for any of the following services: fire protection, police protection, or other public facilities.

Threshold 1 evaluates the Project's potential to cause physical environmental impacts resulting from the construction of new or expanded public facilities, including police protection and fire protection facilities. The construction of new or expanded facilities could result in significant direct and indirect impacts to the environment in the short- and/or long-term.

Analysis

Fire Protection Services

According to the Project's Fire Service Availability form (see Appendix K), the San Diego Rural Fire Protection District has adequate facilities available to serve the Project site. Primary fire protection services would be provided by Interim Station 22 at Bailey Prison on the north end of Alta Road, which has an estimated response time of five minutes to the Project site. A five minute response time would be consistent with the emergency response travel time objective for industrial and commercial development, as established by the Public Facilities Element of the County General Plan. Because the proposed Project is located within an area that can be serviced with acceptable response times, implementation of the Project would not result in the need to construct a new fire station or physically alter an existing station. Accordingly, impacts to fire protection services would be less than significant.

Police Protection Services

The interim sheriff's substation that was constructed near the intersection of Otay Mesa Road and Enrico Fermi Drive in 2009 ensured that the Project area is served by police protection services that meet the PFE's response time standards. Although ultimate development of the proposed Project site would require increased police protection services, such incremental increase in demand would not generate a demand for new or physically altered facilities in the absence of cumulative development. Upon development of the proposed Project site (and in the absence of cumulative development), the

area would continue to be served by police protection services that achieve the PFE's response time standards. Accordingly, implementation of the proposed Project would not result in a direct impact to police protection services associated with the provision of new or physically altered governmental facilities, the construction of which could result in significant environmental impacts.

Public Schools

The Project site would be developed with industrial/commercial land uses; no residential land uses are proposed as part of the Project. Therefore, implementation of the Project would not generate a population requiring public education services. Accordingly, the proposed Project would not place demand on existing schools and would not result in the need to construct a new school or physically alter an existing school. Thus, implementation of the Project would result in no impact to public education services.

Public Libraries

The Project site would be developed with industrial/commercial land uses; no residential land uses are proposed as part of the Project. Therefore, implementation of the Project would not generate a population requiring public library services. Accordingly, the proposed Project would not place a demand on existing library branches and would not result in the need to construct a new library or physically alter an existing library. Thus, implementation of the Project would result in no impact to public library services.

3.1.3.3 Cumulative Impact Analysis

Cumulative Impacts Identified by the EOMSP Final EIR

The EOMSP Final EIR (1994) identifies potentially significant cumulative impacts due to new demand for public schools. No additional cumulative impacts were identified for the issue of Public Services.

Project-Specific Cumulative Impact Analysis

Cumulative Study Area

A study area was defined in order to assess the cumulative effect of the Project's impacts to public services. The resulting study area encompassed the County of San Diego and City of San Diego portions of the Otay Mesa Community, in order to account for any possible overlap in the provision of public services or any mutual aid agreements in place for the provision of public services. Mutual aid agreements in effect between the City of San Diego and the County of San Diego allow for the sharing of police and/or fire protection services in the event of substantial events affecting public safety, such as a large fire. Figure 3.1.3-1, *Cumulative Study Area – Public Services*, depicts the cumulative study area and identifies all of the projects considered in the cumulative impact analysis.

Research was conducted which resulted in a list of 39 past, present, and reasonably foreseeable projects within the study area, that might have potential impacts on public services. EIR Section 1.7 provides a summary of all the projects that were considered along with their identified impacts to each of the environmental issue areas addressed by this EIR. As identified in EIR Table 1-7, *Cumulative Projects CEQA Summary*, seven projects within the cumulative study area have the potential to result in significant public services impacts associated with the provision of police protection services, although it is possible additional projects in the study area may identify

significant public service impacts once the environmental analysis for those projects is completed. The remaining projects identified in Table 1-7 did not identify any significant impacts related to the provision of police services because the local Lead Agencies determined that these projects could be served based on existing or planned facilities, equipment, and staff.

Cumulative Analysis for Police Protection Services

As indicated previously, the Sheriff's Department has indicated a need for a permanent sheriff substation facility to be constructed in East Otay Mesa in order to maintain the required PFE service response times as the East Otay Mesa area develops (i.e., under cumulative conditions). To address this long-term need, the County Sheriff's Department is planning for a long-term law enforcement facility in East Otay Mesa. The new substation facility would consist of a 6,000 square-foot building on an approximate 1.5-acre parcel located at the northwestern corner of Enrico Fermi Drive and Otay Mesa Road. Long-term operation of this new permanent East Otay Mesa sheriff substation would meet the demand for police protection services anticipated under long-term development conditions in the East Otay Mesa area, and the construction of this facility would help ensure that the East Otay Mesa area achieves the PFE service response time standards.

On September 23, 2009, the San Diego County Board of Supervisors authorized the Director of General Services to execute a Joint Community Facilities Agreement (JCFA) with the San Diego RFPD that identifies the terms and conditions for the construction of the permanent Sheriff substation. Pursuant to the JCFA, construction costs for the permanent facility would be provided through a CFD (CFD 09-1) that will levy fees on future developments within the East Otay Mesa area. Funding for staffing and operations of this future substation would be identified within the County Sheriff's Department budget.

Project implementation would contribute to an increased demand for police protection services that cannot be accommodated by existing, interim facilities. As described above, a permanent Sheriff's substation would be required in the East Otay Mesa area to provide adequate police protection services to the area. However, no development plans for the permanent Sheriff's substation in the East Otay Mesa area are available, and it is uncertain when construction of the permanent facility would occur. Accordingly, any analysis of potential environmental effects related to the construction of such a facility would be speculative (CEQA Guidelines Section 15145). Impacts associated with the construction of the permanent Sheriff's facility will require subsequent review under CEQA once development plans for the permanent facility are identified.

As a condition of approval, the proposed Project would provide funding for the construction of a permanent Sheriff's substation facility pursuant to CFD 09-1. The Project's mandatory payment of fees required by CFD 09-1 would adequately offset the Project's contribution to an increased demand for police protection in the East Otay Mesa area by providing a "fair share" toward the cost of developing a permanent Sheriff's substation. The funding to be provided through the CFD also would provide funding for any required mitigation as necessary to avoid significant impacts to the environment (e.g., impacts to air quality, biology, cultural resources, global climate change, noise, paleontological resources). As such, implementation of the Project would not result in a cumulatively significant environmental impact associated with police protection services and facilities..

Cumulative Analysis for Fire Protection Services

One project listed in Table 1-7 identifies impacts to fire protection services. However, cumulative demand placed on fire protection services would not require the physical alteration of existing facilities or the construction of new facilities in order to maintain existing service levels. This is because the Project area already is served by Interim Station 22 at Bailey Prison, and the San Diego Rural Fire Protection District has indicated that it has adequate facilities available to serve the Project site when considered in the context of past, present, and reasonably foreseeable developments within its service area. As such, implementation of the proposed Project would not require the construction or expansion of any fire protection facilities which could result in impacts to the environment; accordingly, Project implementation would not result in a cumulatively significant impact to fire protection services and facilities.

Cumulative Analysis for Public Schools and Libraries

The proposed Project would have no impact on school or library facilities, since the Project would not generate a demand for either school or library services. Accordingly, a cumulatively significant impact to school and library services would not occur with implementation of the proposed Project, and the Project would not cumulatively contribute to the need for the construction or expansion of any school or library facilities.

3.1.3.4 Significance of Impacts Prior to Mitigation

As indicated in the analysis provided throughout this section, implementation of the proposed Project would not result in any significant direct or cumulative environmental impacts associated with public services and facilities.

3.1.3.5 Mitigation

Mitigation Measures from the EOMSP Final EIR

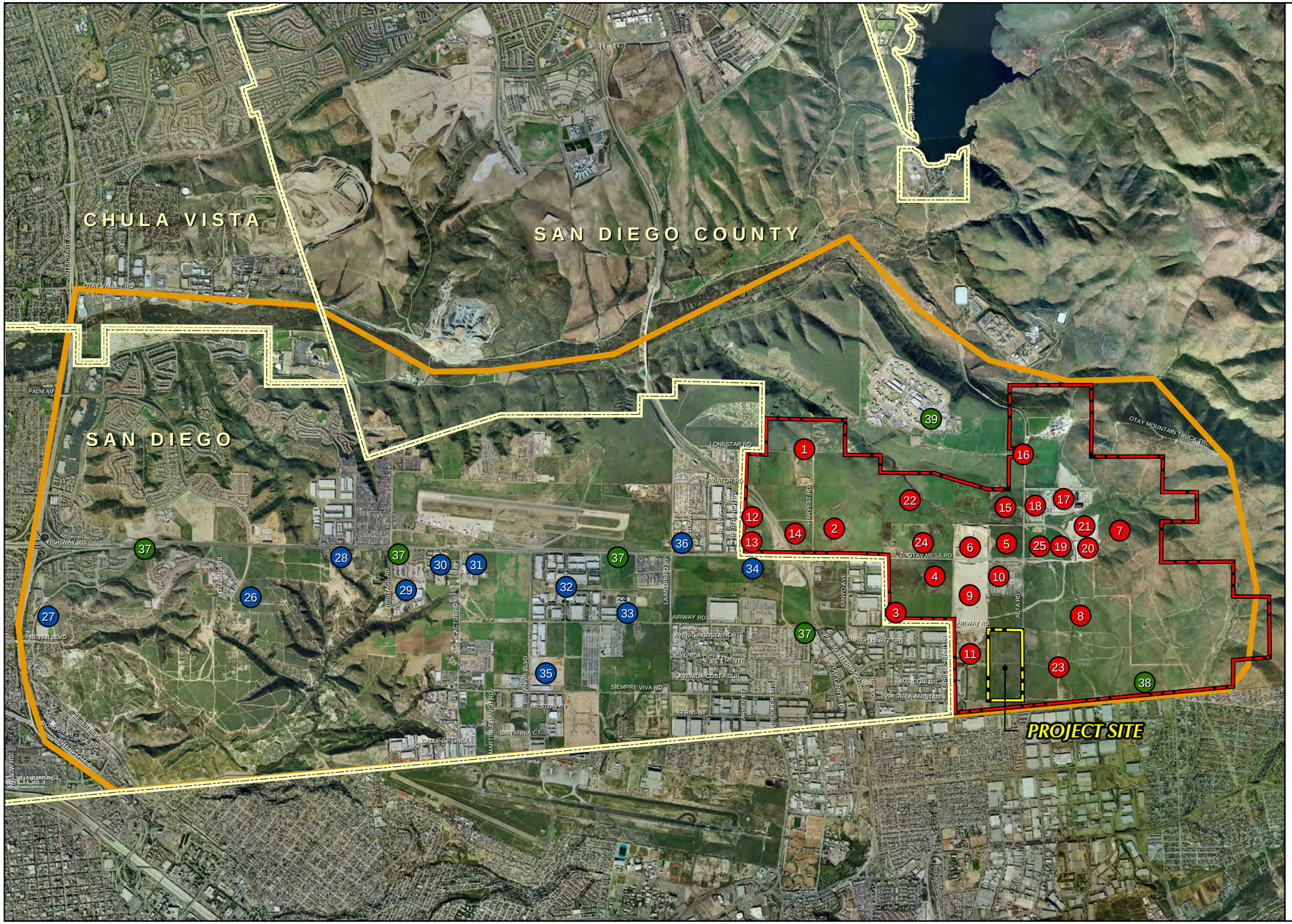
Mitigation measures were identified by the EOMSP Final EIR (1994) to address impacts to Public Services which could result from implementation of the EOMSP; however, these measures were related to schools and solid waste. Pursuant to the proposed Project's Initial Study, it was determined that the proposed Project would not result in impacts to school services or solid waste facilities. Therefore, the mitigation measures specified in the EOMPS Final EIR for Public Services are not applicable to the proposed Project.

Project-Specific Mitigation

As identified in the analysis throughout this Chapter, significant impacts to public services beyond that which was identified in the Final EIR for the EOMSP would not occur with implementation of the proposed Project. Therefore, mitigation would not be required. However, the Project applicant will be required as a condition of approval to construct or participate in funding for the construction of a permanent Sheriff's substation to serve the East Otay Mesa area (see SEIR Section 7.2.6).

3.1.3.6 Conclusion

Implementation of the proposed Project would not result in significant direct or cumulative impacts to public services, and mitigation beyond the mitigation measures identified in the EOMSP Final EIR would not be required.



CUMULATIVE PROJECTS

County of San Diego Projects

1. East Otay Mesa Specific Plan
2. Otay Tech Center
3. Airway Business Center/FedEx
4. Enrico Fermi Industrial Park
5. East Otay Auto Storage
6. East Otay Auto Transfer
7. Otay Hills Quarry
8. Otay Crossings Commerce Park
9. Otay Mesa Travel Plaza
10. East Otay Temporary Fire Facility
11. Burke Minor Subdivision
12. Piper Otay Park Subdivision
13. Pilot Travel Center Site Plan
14. California Crossings
15. CCA San Diego Correctional Facility
16. National Enterprises Auto Storage/Recycling
17. Otay Mesa Generating Project
18. Power Plant Laydown Site
19. Paseo De La Fuente
20. Vulcan Site Grading Plan
21. Vulcan Batching Plant
22. International Industrial Park
23. Otay Business Park
24. Ragabo Otay Technology Park
25. OMC Properties Subdivision

City of San Diego Projects

26. Southview
27. Remington Hills
28. Otay Corporate Center South
29. Pacific Gateway
30. Mesa Business Park
31. Otay Heights Business Park
32. Brown Field Business Park
33. Empire Center
34. San Diego Mesa
35. Just Rite
36. World Petrol III

Other Projects

37. SR-905 (Multiple Points)
38. SR-11 and Otay Mesa East Port of Entry
39. CA Health Care Facility, R. J. Donovan Correctional Facility

East Otay Mesa Specific Plan

Cumulative Study Area - Public Services

0 2,000 4,000 Feet

FIGURE 3.1.3-1

Cumulative Study Area - Public Services

3.1.4 Utilities and Service Systems

The previously certified EIR for the EOMSP identified significant and mitigable impacts for Public Services and Utilities related to the generation of solid waste. Mitigation measures were identified to reduce potential impacts related to solid waste to below a level of significance. The proposed Project and future development permits for the Project site would be required to comply with these mitigation measures, which would reduce Project impacts related to solid waste to below a level of significance. Chapter 7.0 of this SEIR, *List of Mitigation Measures and Environmental Design Considerations*, includes a summary of all applicable mitigation measures from the EOMSP EIR which would continue to be enforced upon approval of the proposed Project. In addition, the proposed Project and future development permits for the Project site would be required to comply with the solid waste policies established in the EOMSP to minimize the generation of solid waste. Because impacts associated with solid waste have already been determined to be less than significant with incorporation of the applicable mitigation measures, no additional solid waste analysis is warranted in this SEIR.

3.1.4.1 Existing Conditions

Water Services

Public water service within the Project area is provided by the OWD. The OWD provides water service to approximately 191,500 people within its 80,140 acre (approximately 125.5 square mile) service area, in southeastern San Diego County. The OWD owns 709 linear miles of potable water mains, 96 miles of recycled water mains, 40 potable water reservoirs (storage capacity: 226.3 million gallons), 4 recycled water reservoirs (storage capacity: 43.7 million gallons), and has approximately 47,341 water connections.[1] The OWD purchases potable water from the San Diego County Water Authority (SDCWA), Metropolitan Water District of Southern California, and the Helix Water District. Recycled water is supplied by the OWD's Ralph W. Chapman Water Recycling Facility; however, the OWD has entered into an agreement with the City of San Diego to purchase additional recycled water, as needed.[2]

The Project site is undeveloped and water service is not currently connected to the site. The OWD operates and maintains a 24-inch water main and a 16-inch water main along Alta Road, adjacent to the eastern boundary of the Project site.

Sewer Service

The Project site is located within the service area of SDCSD, which is a Participating Agency of the San Diego Metropolitan Wastewater Joint Powers Authority (Metro Wastewater). Sewer service is currently unavailable to the Project site. The nearest sewer connection to the Project site is located along Enrico Fermi Drive, approximately 1,400 feet west of the Project site. Upon connection to the existing sewer connection, wastewater from the Project site would be conveyed to the Point Loma Wastewater Treatment Plant (WTP) via a system of existing sewer lines and pump stations. The Point Loma WTP has a current capacity of 240 million gallons per day (mgd), and processes approximately 175 mgd per day. Accordingly, the total amount of excess capacity at the Point Loma

[1] OWD. "About Us." Available at http://www.otaywater.gov/owd/pages/about/abouthome.aspx
[2] OWD. *Otay Water District Updated 2005 Urban Water Management Plan*.

WTP is estimated at approximately 65 mgd, or approximately 282,000 equivalent dwelling units (EDU).

Stormwater Drainage Facilities

There are no stormwater drainage facilities in place to convey stormwater runoff from the Project site. In the existing condition, stormwater runoff is conveyed through the site via natural drainage courses and flows south to the U.S./Mexico border, where it is conveyed by a series of culverts and drainage channels before ultimately combining with the Tijuana River.

3.1.4.2 Analysis of Project Effects and Determination as to Significance

East Otay Mesa Specific Plan Final EIR

The EOMSP Final EIR disclosed impacts associated with water and wastewater services. With respect to water services, the EOMSP Final EIR concluded that no significant impacts would occur after compliance with standard mitigation requiring compliance with the then-applicable water demand standards. For wastewater services, the Final EIR concluded that significant impacts would occur, absent mitigation, due to the lack of wastewater treatment and conveyance facilities.

Since approval of the EOMSP in 1994, there have been a number of changes to the planned and/or operational utilities and service systems within the EOMSP area. A master plan has been developed by the Otay Water District which includes plans to service the entire EOMSP, including the proposed Project site. A master plan also has been developed for the East Otay Mesa Sewer Maintenance District that includes a number of financing alternatives. Based on these changed circumstances, the County of San Diego has determined that a supplemental analysis of potential public services impacts is necessary to adequately identify, disclose, and mitigate for impacts that could result from Project implementation.

Water and Sewer Facilities

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on utilities and service systems if any of the following would occur as a result of a Project related component:

(1) The proposed Project would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

(2) The proposed Project would result in a determination that existing water entitlements and resources are not adequate to serve the project, and/or that new entitlements and resources would be needed.

(3) The proposed Project would result in a determination by the wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Threshold 1 evaluates the Project's potential to cause physical environmental impacts resulting from the construction of new or expanded water or wastewater facilities. Threshold 2 evaluates the Project's potential to exceed available water supplies. Thresholds 1 and 3 evaluate the Project's

potential to exceed existing wastewater treatment capacity and cause the construction of additional wastewater treatment facilities. The construction of new or expanded water or wastewater facilities and the acquisition of additional water supplies or wastewater treatment capacity could result in significant direct and indirect impacts to the environment in the short- and/or long-term.

Analysis

Water Facilities

Water service would be provided to the site by the OWD. Existing facilities are in place to service the Project site, and the proposed Project would connect to an existing 24-inch water main at the intersection of Alta Road and Airway Road. Improvements to water infrastructure would be necessary on-site and within Alta Road Airway Road, Siempre Viva Road, Via de la Amistad, Hawano Drive North, and Hawano Drive South, and could potentially result in short-term, construction-related impacts to the environment. Figure 1-10 depicts the existing and proposed on- and off-site water infrastructure. Environmental impacts associated with construction have been addressed throughout this SEIR[3], and mitigation has been provided in each applicable section of this SEIR to reduce all potential significant, short-term construction impacts to below a level of significance. Therefore, a significant impact due to the construction of water infrastructure as necessary to serve the proposed Project would not occur, or would be mitigated to below a level of significance with application of the mitigation measures provided throughout this SEIR.

Water Supply

At the request of San Diego County, the OWD prepared a Water Supply Assessment Report (WSA) in January 2012 pursuant to Public Resources Code Section 21151.9 and California Water Code Sections 10631, 10656, 10657, 10910, 10911, 10912 and 10915. The WSA was prepared for the proposed Project evaluates the OWD's ability to serve the proposed Project with potable and recycled water from existing and planned resources. A copy of the Project's WSA is included in Appendix L to this SEIR.

According to the WSA, the proposed Project is currently located within the jurisdictions of the OWD, the San Diego County Water Authority (Water Authority), and the Metropolitan Water District of Southern California (Metropolitan). The Water Authority and Metropolitan have an established process that ensures supplies are being planned for and documented to meet future growth. The Water Authority and Metropolitan update their demand forecasts and supply needs based on the most recent SANDAG forecast approximately every five years to coincide with preparation of their urban water management plans, and these regular updates are intended to ensure that any revisions to land use plans and annexations are accounted for in the plans. These agencies also identify a planning buffer supply to mitigate against the risks associated with implementation of local and imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. As part of implementation of the planning buffer, Metropolitan periodically evaluates supply development to ensure that the region is not under or over developing supplies. Managed properly, the planning buffer will help ensure that the southern California region, including San Diego County, will have adequate supplies to meet future demands.

[3] Impacts associated with the construction of off-site water and sewer facilities are addressed under the issue areas of Air Quality, Biological Resources, Cultural Resources, Noise, and Paleontological Resources.

The WSA Report for Hawano Project identifies that the water demand projections for the proposed Project are included in the water demand and supply forecasts within the water resources planning documents of the OWD, the Water Authority, and Metropolitan. Water supplies necessary to serve the demands of the proposed Business Park project, along with existing and other projected future users, as well as the actions necessary to develop these supplies, are also identified in the water supply planning documents of the OWD, the Water Authority, and Metropolitan. The potable and recycled water demand projections and supply requirements for the proposed Project are currently within the water resources planning documents of the OWD, Water Authority, and Metropolitan.

The WSA Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, or agreements relevant to the identified water supply needs for the proposed Project. The WSA Report demonstrates and documents that sufficient water supplies are planned to be made available over a 20-year planning horizon for normal and in single dry and multiple dry years to meet the projected demand of the proposed Project and the existing and other planned development projects within the OWD.

Table 3.1.4-1, *Projected Balance of Water Supplies and Demands – Normal Year Conditions,* presents the forecasted balance of water demands and required supplies for the OWD service area under average or normal year conditions. Table 3.1.4-2, *Projected Balance of Water Supplies and Demands – Single Dry Year and Multiple Dry Year Conditions,* presents the forecasted balance of water demands and supplies for the OWD service area under single dry year conditions and under multiple dry year conditions for the five year period ending in 2015. Multiple dry year conditions for periods ending 2020, 2025, and 2030 are provided in the OWD revised 2005 UWMP. The projected potable and recycled water demand and supply requirements shown in Table 3.1.4-1 and Table 3.1.4-2 are from the OWD revised 2005 UWMP and include those of the proposed Project. Hot, dry weather may generate urban water demands that are about seven percent greater than normal. This percentage was utilized to generate the dry year demands shown in Table 3.1.4-2. The recycled water supplies are assumed to experience no reduction in a dry year.

The WSA Report prepared for the Project demonstrates that sufficient water supplies are planned and identifies and documents the actions necessary to develop these supplies to meet projected water demands of the proposed Project and the existing and other reasonably foreseeable planned development projects within the OWD for a 20-year planning horizon, in normal and in single and multiple dry years. Therefore, based on the Project-specific WSA, the OWD, Water Authority and Metropolitan would have sufficient water supplies available to serve the project from existing water entitlements and resources, and no new or expanded entitlements and resources would be needed beyond those already identified in the RUWMP or the OWD UWMP. Therefore, with implementation of the proposed Project, impacts to water supply would be less than significant.

Wastewater Conveyance Facilities

Sewer service is not available to the site under existing conditions and implementation of the Project would require the extension of sewer infrastructure. As depicted on Figure 1-9 and discussed in EIR Section 1.2.2.1, the Project proposes to extend sewer infrastructure to an existing connection at the intersection of Enrico Fermi Drive and Via De La Amistad. The proposed sewer flows would be conveyed north from the proposed off-site regional pump station site (located easterly of proposed Lot 24) by means of an alternate alignment via a proposed dual 8-inch force main primary (FM ALT)

along Alta Road and Siempre Viva Road rights-of-way; thence gravity flow south in a proposed 18-inch sewer main along Enrico Fermi Drive right-of-way and ultimately connecting to an existing City of San Diego 27-inch sewer main (EOM 6 connection point per the East Otay Mesa Basin No. 6 Regional Sewer Study) at the intersection of Via De La Amistad and Enrico Fermi Drive. Sewer improvements would require construction of approximately 3,800 feet of new dual force mains off-site as necessary to connect to the existing 27-inch sewer main. The proposed pump station would incorporate mitigation measures (i.e., chemical insertion) to control potential increased odors and corrosion effects from pumping operations. Improvements to sewer infrastructure could potentially result in short-term, construction-related impacts to the environment. Environmental impacts associated with construction have been addressed throughout this EIR[3], and mitigation has been provided in each applicable section for all potential significant short-term impacts. Therefore, a significant impact due to the construction of sewer infrastructure as necessary to serve the proposed Project would not occur, or would be mitigated to below a level of significance with application of the mitigation measures provided throughout this EIR.

Wastewater flows from a majority of the EOMSP, including flows from the Project, would be conveyed by the Otay Mesa Trunk Sewer (OMTS) to existing sewer facilities adjacent to and west of Interstate 5 and ultimately to the Point Loma WTP. The OMTS has been sized to accommodate ultimate wastewater flows of 3 mgd. The Final EIR for the EOMSP evaluated impacts that would occur to sewer conveyance facilities upon full build-out of the EOMSP and determined that sewer conveyance infrastructure in Otay Mesa would not have adequate capacity for wastewater flows that would be generated by full build-out of the land uses planned by the EOMSP. The EOMSP EIR identified that the OMTS could accommodate flows up to 1.0 mgd from the County portion of Otay Mesa prior to exceeding the capacity of the facility, as it was estimated that the City portion of Otay Mesa would utilize the remaining 2.0 mgd capacity. The maximum sewer flow of 1.0 mgd was identified in EOMSP Final EIR Mitigation Measure 11C.

According to the East Otay Mesa Basin No. 6 Regional Sewer Study (which includes the Project site), total average flows under buildout conditions are projected to comprise only 0.94 mgd (including flows from the portions of the EOMSP not included in Basin No. 6). As such, implementation of the proposed Project would be consistent with EOMSP Final EIR Mitigation Measure 11C and would not exceed the capacity of wastewater conveyance systems; therefore, no new impacts are identified.

Wastewater Treatment Facilities

Wastewater from the Project site would be conveyed to the Point Loma WTP. The Point Loma WTP processes approximately 175 mgd, approximately 65 mgd less than its current operating capacity. As discussed in EIR Section 1.2.2.1, the Project is projected to generate 59,300 gallons of wastewater per day (0.059 mgd), or approximately 247 EDUs. This amount of wastewater would represent approximately 0.09-percent of the current available capacity at the Point Loma WTP. Because adequate wastewater treatment capacity is available, implementation of the proposed Project would not result in a significant impact to Metro Wastewater's wastewater treatment capabilities and mitigation would not be required.

Stormwater Drainage Facilities

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on utilities and service systems if the following would occur as a result of a Project-related component:

(4) The proposed Project would require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Threshold 4 is included to address potential impacts that might result from the construction of new storm water facilities. The construction of new or expanded stormwater drainage facilities could result in significant direct and indirect impacts to the environment in the short- and/or long-term.

Analysis

There are no existing stormwater drainage facilities to convey stormwater runoff from the Project site, and no public stormwater drainage facilities are proposed as part of the EOMSP. As established by the EOMSP, development projects in the southern watershed region (like the proposed Project) would be required to provide on-site detention basins to ensure that peak runoff flows traveling south to Mexico do not exceed historical rates.

As depicted on Figure 1-8 and discussed in Section 3.1.2, *Hydrology and Water Quality*, the Project proposes to a detention basin on-site (within Lot 23) and a storm drain conveyance system to minimize flood hazard risks associated with stormwater runoff. Environmental impacts associated with construction of on-site detention basins have been addressed throughout this EIR. As discussed in Section 3.1.2, and illustrated on Table 3.1.2-1, *Pre- and Post-Development 100-Year Storm Flows*, implementation of the Project would not increase peak runoff flows above existing levels. Accordingly, implementation of the Project would not increase the rate or amount of runoff leaving the Project site and would not require the construction of new or expanded off-site drainage facilities which would result in significant environmental effects, except as identified and mitigated for throughout this SEIR.

3.1.4.3 Cumulative Impact Analysis

Cumulative Impacts Identified by the EOMSP Final EIR

The EOMSP Final EIR (1994) did not identify or disclose any cumulatively significant impacts to utilities and service systems.

Project-Specific Cumulative Impact Analysis

Cumulative Study Area

A study area was defined in order to assess the cumulative effect of the Project's impacts associated with utilities and service systems. The cumulative study area for water service was established based primarily on the OWD Division 2 service area, excluding those portions of Division 2 which occur northerly of the Otay River Valley. Areas to the north of the Otay River Valley would be served by separate wastewater and stormwater conveyance systems, and were therefore excluded from the cumulative study area. Although projects located northerly of the Otay River Valley within the OWD Division 2 service area are cumulatively considerable in terms of water supply, the cumulative

effect of these development projects already is accounted for in the Project-specific WSA prepared by the OWD. The cumulative study area for wastewater service encompasses the East Otay Mesa Sewer Maintenance District, which includes all properties that would contribute wastewater flows to the OMTS. The cumulative study area for drainage facilities encompasses 1,020 acres of the Otay Mesa community, and includes all lands located upstream that would contribute stormwater flows through the proposed Project site. Figure 3.1.4-1, *Cumulative Study Area – Utilities and Service Systems*, depicts the extent of the cumulative study area and lists those projects that are considered in the analysis.

As shown in Table 1-7, six projects within the County of San Diego (identified as projects 1, 8, 15, 16, 21, and 39 in Table 1-7) and two projects within the City of San Diego (projects 26 and 27) are identified as having significant but mitigable impacts to utilities and service systems primarily due to a lack of infrastructure. Both the projects identified within the City of San Diego are located outside of the project's cumulative study area for utilities and service systems. It should be noted, however, that the CEQA review for several of the Projects listed in Table 1-7 has not been completed, and it is possible that more projects within the cumulative study area could be identified as having significant impacts to utilities and service systems once the CEQA analysis is complete. Moreover, even projects that do not result in significant impacts also could be cumulatively considerable if such impacts, when combined with project impacts, result in a significant environmental effect.

Cumulative Analysis for Utility/Service System Infrastructure Construction

As part of the proposed Project, a number of off-site improvements would be necessary in order to facilitate water, sewer, and stormwater drainage services to the site. Cumulative impacts associated with these off-site improvements are addressed under appropriate issue areas throughout this EIR, including the issue areas of Air Quality, Biological Resources, Cultural Resources, Noise, and Paleontological Resources. In each of these issue areas, mitigation has been identified to reduce or eliminate significant environmental effects associated with the constructions of water, sewer, and stormwater drainage facilities necessary to serve the proposed Project.

Cumulative Analysis for Water Supplies and Services

The OWD WSA (January 2012) evaluates the District's ability to supply water to all past, present, and reasonably foreseeable projects within its service boundaries, including the proposed Project. The WSA therefore includes a cumulative analysis of the Project's anticipated impacts to water services and supplies. As described more fully in SEIR Section 3.1.4.2 , the WSA Report prepared for the Project demonstrates that sufficient water supplies are planned and identifies and documents the actions necessary to develop these supplies to meet projected water demands of the proposed Project and the existing and other reasonably foreseeable planned development projects within the OWD for a 20-year planning horizon, in normal and in single and multiple dry years. Therefore, based on the Project-specific WSA, the OWD, Water Authority and Metropolitan would have sufficient water supplies available to serve the project from existing water entitlements and resources, and no new or expanded entitlements and resources would be needed beyond those already identified in the RUWMP or the OWD UWMP. Therefore, with implementation of the proposed Project, cumulatively significant impacts to water supplies would not occur.

Cumulative Analysis for Wastewater/Sewer Facilities

The Final EIR for the EOMSP evaluated impacts that would occur to sewer conveyance facilities upon full build-out of the EOMSP and determined that implementation of the EOMSP would result

in significant impacts to sewer conveyance infrastructure in Otay Mesa. The EOMSP Final EIR imposed a mitigation measure (Mitigation Measure 11C) that limited near-term development within the EOMSP to 1.0 million gallons of wastewater per day. It was determined that Mitigation Measure 11C would reduce impacts to sewer conveyance facilities to less than significant levels until such a time that adequate sewer conveyance facilities were developed to accommodate additional development within the EOMSP area. As discussed in the East Otay Mesa Basin No. 6 Regional Sewer Study (May 2009), projected average daily flows to the OMTS from the EOMSP upon ultimate buildout would comprise approximately 0.94 mgd. As such, implementation of the proposed Project would be consistent with EOMSP Final EIR Mitigation Measure 11C, and no new impacts are identified.

As discussed above in Section 3.1.4.2 under the analysis of wastewater treatment facilities, wastewater from the Project site would be conveyed to the Point Loma WTP. The Point Loma WTP processes approximately 175 mgd, approximately 65 mgd less than its current operating capacity. As discussed in EIR Section 1.2.2.1, the Project is projected to generate 59,300 gallons of wastewater per day (0.059 mgd), or approximately 247 EDUs. This amount of wastewater would represent approximately 0.09-percent of the current available capacity at the Point Loma WTP. In addition, planned improvements to the Point Loma WTP will increase wastewater treatment capacity to serve an estimated population of 2.9 million through the year 2050. Nearly 340 million gallons of wastewater will be generated each day by that year[4]. Therefore, adequate capacity currently exists to serve the proposed Project and other cumulative developments with wastewater treatment services, and planned upgrades to this facility will ensure that wastewater generated from future growth also will be accommodated. Therefore, implementation of the proposed Project would not result in a cumulatively significant impact to Metro Wastewater's wastewater treatment capabilities and mitigation would not be required.

Cumulative Analysis for Stormwater Facilities

The proposed Project site is located at the southern end of two drainage basins encompassing approximately 170 acres. The Project's proposed on-site storm system has been designed to accommodate all existing flows from off-site properties while providing for appropriate detention of on-site run-off. All flows from the on- and off-site portions of the Project site would be discharged to the south of the site, where it would be conveyed by a series of culverts and drainage channels before ultimately discharging into the Tijuana River (following appropriate treatment for water quality). As such, a cumulatively significant impact associated with stormwater facilities would not occur.

3.1.4.4 Significance of Impacts Prior to Mitigation

As indicated in the analysis provided throughout this section, implementation of the proposed Project would not result in any significant direct or cumulative impacts to utilities and service systems. The proposed Project is, however, located within the EOMSP, and would therefore be required to comply with the mitigation measures identified in the EOMSP Final EIR for utilities and service systems, which are summarized below in SEIR Section 3.1.4.5.

[4] Source: Point Loma Wastewater Treatment Plant and Ocean Outfall Annual Monitoring Report, 2007. Available on-line at: http://www.sandiego.gov/mwwd/environment/plantmonitoring.shtml#loma.

3.1.4.5 Mitigation

Mitigation Measures from the EOMSP Final EIR

Mitigation measures were identified by the EOMSP Final EIR (1994) to address impacts to Utilities and Service Systems which could result from implementation of the EOMSP, and included the following:

> *11B. Domestic water demand shall be reduced through use of the Best Management Practices water conservation measures as identified by the Metropolitan Water District and the San Diego County Water Authority. This shall include preparation of a water conservation plan to document these measures.*
>
> *11C. No development beyond that which can be served by the initial 1.0 million gallons per day capacity shall be allowed until long-term sewer service capacity has been provided. In addition, no development shall be allowed until all the necessary infrastructure has been constructed and facilities are operable.*

These mitigation measures have been incorporated by the proposed Project and would serve to reduce Project-related effects to utilities and service systems. Project compliance with Mitigation Measure 11B would be fulfilled through adherence to the EOMSP requirements for landscaping as well as through compliance with the County's Water Conservation and Landscaping Ordinance and Design Manual. In addition, future buildings on-site would be built with water efficient fixtures as required by the building code.

Mitigation Measure 11C limits near-term development within the EOMSP to 1.0 million gallons of wastewater per day. As discussed in the East Otay Mesa Basin No. 6 Regional Sewer Study (May 2009), projected average daily flows to the OMTS from the EOMSP upon buildout would comprise approximately 0.94 mgd. As such, implementation of the proposed Project would be consistent with EOMSP Final EIR Mitigation Measure 11C.

Project-Specific Mitigation

As identified in the analysis throughout this Chapter, significant impacts to utilities and service systems beyond that which was identified in the Final EIR for the EOMSP would not occur with implementation of the proposed Project. Therefore, mitigation would not be required. However, the Project applicant will be required as a condition of approval to construct or participate in funding for necessary sewer improvements to serve the Project (see Chapter 7.2.5).

3.1.4.6 Conclusion

Implementation of the proposed Project would not result in significant direct or cumulative impacts to utilities and service systems, and mitigation beyond the mitigation measures identified in the EOMSP Final EIR would not be required.

Table 3.1.4-1 PROJECTED BALANCE OF WATER SUPPLIES AND DEMANDS – NORMAL YEAR CONDITIONS

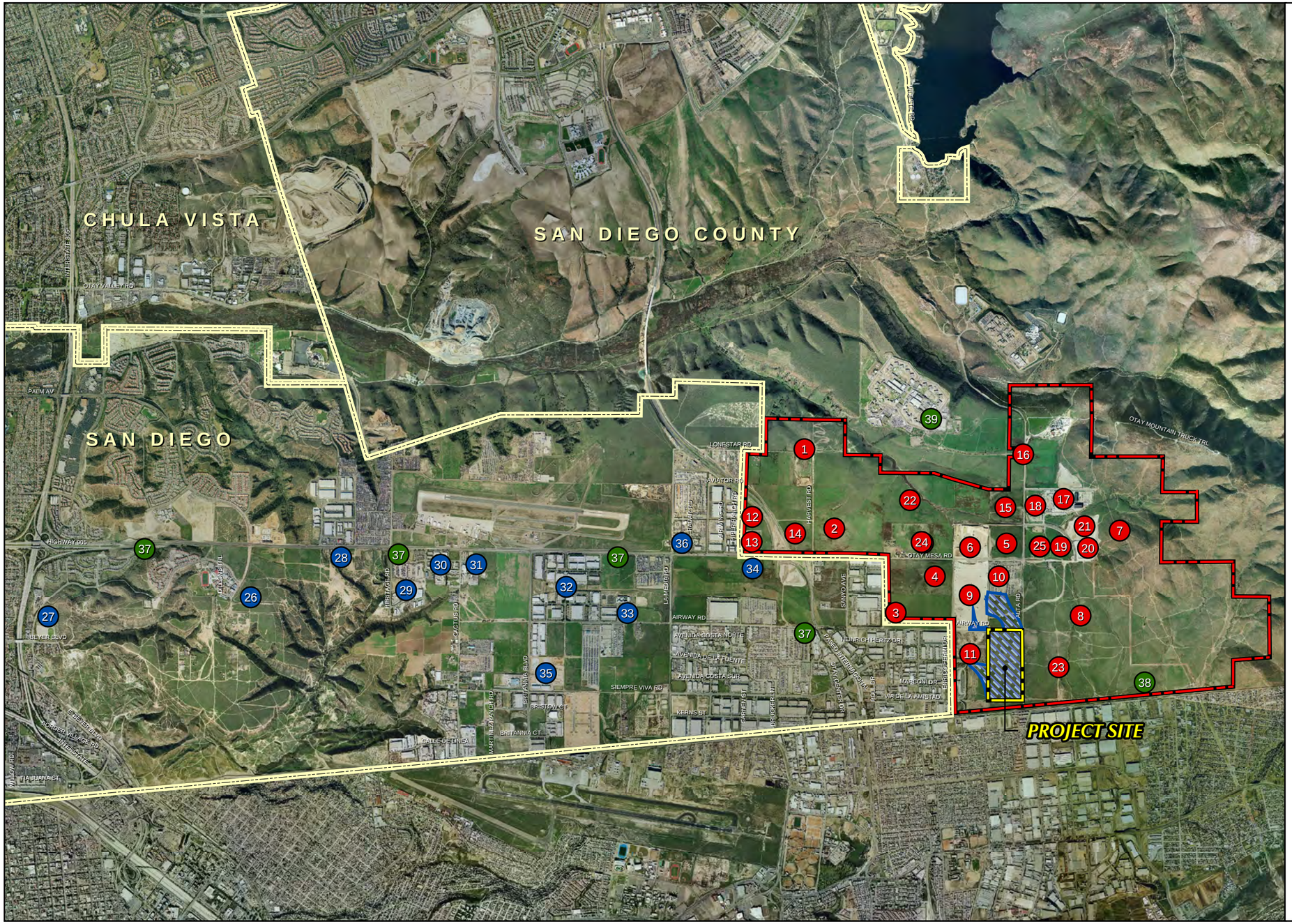
Description	FY 2015	FY 2020	FY 2025	FY 2030	FY 2035
Demands					
OWD Demands	44,883	53,768	63,811	70,669	77,171
Hawano Project Demand Increase	0	0	0	0	0
Additional Conservation Target	0	(7,447)	(13,996)	(17,895)	(20,557)
Total Demand	44,883	46,321	49,815	52,774	56,614
Supplies					
Water Authority Supply	40,483	41,321	44,015	45,974	48,614
Recycled Water Supply	4,400	5,000	5,800	6,800	8,000
Total Supply	44,883	46,321	49,815	52,774	56,614
Supply Surplus/(Deficit)	**0**	**0**	**0**	**0**	**0**

Note: Values shown are in acre feet.
Source: Otay Water District, January 2012

Table 3.1.4-2 PROJECTED BALANCE OF WATER SUPPLIES AND DEMANDS – SINGLE DRY YEAR AND MULTIPLE DRY YEAR CONDITIONS

	Normal Year	Single Dry Year	Multiple Dry Years		
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Demands					
OWD Demands	37,176	41,566	43,614	46,385	50,291
Total Demand	37,176	41,566	43,614	46,385	50,291
Supplies					
Water Authority Supply	33,268	37,535	39,460	42,108	45,891
Recycled Water Supply	3,908	4,031	4,154	4,277	4,400
Total Supply	37,176	41,566	43,614	46,385	50,291
Supply Surplus/(Deficit)	**0**	**0**	**0**	**0**	**0**
District Demand totals with SBX7-7 conservation target achievement plus single dry year increase as shown. The Water Authority could implement its DMP. In this instances, the Water Authority may have to allocate supply shortages based on it equitable allocation methodology in its DMP.					

Note: Values shown are in acre feet. Dry year demand assumed to generate a 6.4% increase in demand over normal conditions for each year in addition to new demand growth.
Source: Otay Water District, January 2012



CUMULATIVE PROJECTS

County of San Diego Projects

1. East Otay Mesa Specific Plan
2. Otay Tech Center
3. Airway Business Center/FedEx
4. Enrico Fermi Industrial Park
5. East Otay Auto Storage
6. East Otay Auto Transfer
7. Otay Hills Quarry
8. Otay Crossings Commerce Park
9. Otay Mesa Travel Plaza
10. East Otay Temporary Fire Facility
11. Burke Minor Subdivision
12. Piper Otay Park Subdivision
13. Pilot Travel Center Site Plan
14. California Crossings
15. CCA San Diego Correctional Facility
16. National Enterprises Auto Storage/Recycling
17. Otay Mesa Generating Project
18. Power Plant Laydown Site
19. Paseo De La Fuente
20. Vulcan Site Grading Plan
21. Vulcan Batching Plant
22. International Industrial Park
23. Otay Business Park
24. Ragabo Otay Technology Park
25. OMC Properties Subdivision

City of San Diego Projects

26. Southview
27. Remington Hills
28. Otay Corporate Center South
29. Pacific Gateway
30. Mesa Business Park
31. Otay Heights Business Park
32. Brown Field Business Park
33. Empire Center
34. San Diego Mesa
35. Just Rite
36. World Petrol III

Other Projects

37. SR-905 (Multiple Points)
38. SR-11 and Otay Mesa East Port of Entry
39. CA Health Care Facility, R. J. Donovan Correctional Facility

East Otay Mesa Specific Plan

Watershed Impacting Project Site

0 2,000 4,000 Feet

FIGURE 3.1.4-1

Cumulative Study Area - Utilities and Service Systems

3.2 Effects Found Not Significant During Initial Study

The following issues were determined not to be potentially significant during the review of previously certified EIR: Aesthetics, Agriculture and Forest Resources, Land Use and Planning, Mineral Resources, Population and Housing, and Recreation. A copy of the Environmental Review Update Checklist Form, dated December 17, 2010, is provided in Appendix A of this EIR. A summary of the findings from this document for these issue areas is provided below.

3.2.1 Aesthetics

The previously certified EIR for the EOMSP concluded that significant but mitigable impacts related to visual quality/land use alteration would occur, largely due to grading associated with the hillside residential portions of the Specific Plan area. However, no significant landform alteration or visual impacts were expected from development of the flatter industrial and commercial areas in the southern portion of the Specific Plan area. The proposed project is located within the flatter, southern portion of the Specific Plan area. Future development of the individual lots on the Project site would consist of one- or two-story structures, which would be required to comply with the development regulations and design guidelines of the EOMSP, including building design and landscape requirements. Accordingly, implementation of the Project would not adversely impact local visual quality or visual character and impacts would not be substantially greater than was identified in the previous EIR. Mitigation measures contained in the previously certified EIR pertaining to aesthetics are not applicable to the proposed project.

3.2.2 Agriculture and Forestry Resources

The EIR, found the loss of important farmland (Prime Farmland, Farmland of Statewide Importance, and Farmland of Local Importance) to be less than significant as there was limited area with this classification and agricultural use could continue in the Specific Plan area as an interim use prior to buildout. In addition, active agricultural activities were not in evidence at the time of certification of the original EIR and no mitigation measures were deemed necessary.

The proposed Project site is zoned for mixed industrial land uses and is not located within an agricultural zone. In addition, the Project site is not under a Williamson Act contract. The Project site and the surrounding area do contain soils that are designated as Farmland of Local Importance; however, the Project site has not been used for any agricultural purpose for many years and there are no active agricultural operations within a 10-mile radius of the site. Therefore, impacts to agricultural resources would not be substantially greater than was disclosed in the previous EIR.

In addition, the Project site does not contain forest resources and forest resources are not located in the vicinity of the Project site. Therefore, the Project would not result in any impacts to forest resources.

3.2.3 Land Use and Planning

The previously certified EIR for the EOMSP identified significant but mitigable land use impacts related to conversion of land use from undeveloped or historical agriculture to industrial/commercial/residential use, and compatibility issues between existing/proposed residential development and proposed industrial/commercial development. Compatibility issues were also

raised regarding impacts to future residences from the State Prison and County detention facility, and impacts to the boundary monument and U.S./Mexico border.

The Project site is located at the southern end of the Specific Plan area and there are no existing or proposed residences in the vicinity of the site. In addition, the proposed Project would ultimately develop the site with land uses that are consistent with the EOMSP. Future development of the site would be required to comply with all applicable use regulations and development standards established by the EOMSP. Accordingly, implementation of the Project would not result in impacts substantially greater than was disclosed by the previous EIR. Of the mitigation measures contained in the previous EIR, only one (1.A.1. - Adherence to noise mitigation measures required in Section 4.8 of the previous EIR) applies to the project. See Section 2.6 of this SEIR for discussion and analysis pertaining to potential noise impacts.

3.2.4 Mineral Resources

No impacts to mineral resources were anticipated by the previous EIR. Prospects were reported in the San Ysidro Mountains to the east of the Specific Plan area and no producing mines or quarries existing within the Specific Plan Area; however, as of the writing of this SEIR an application for a mining operation at the eastern boundary of the Specific Plan area was in process with the County. That site is at the western base of the San Ysidro Mountains and is approximately one mile northeast of the proposed Project site. Regardless, the Project site has not been actively mined and contains no known mineral resources and there are no active or abandoned mines or quarries in the Project vicinity. Accordingly, implementation of the Project would not result in significant impacts to mineral resources and impacts would not be substantially greater than was identified in the previous EIR.

3.2.5 Population and Housing

The EIR for the EOMSP concluded that implementation of the plan would result in a positive socio-economic benefit and would not result in adverse population and housing impacts due to the geographic constraints of the Specific Plan area. No mitigation measures were deemed necessary. As discussed in Section 1.8 of this SEIR, implementation of the Project would be consistent with the land uses designated for the site by the EOMSP and the proposed Project would not result in growth-inducing impacts. Accordingly, the proposed Project would not result in impacts substantially greater than was disclosed by the previous EIR.

3.2.6 Recreation

No significant impacts to parks or trails were identified in the previously certified EIR, thus, no mitigation measures were deemed necessary. The Project does not propose any residential use, including but not limited to a residential subdivision, mobile home park, or construction for a single-family residence that may increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. Therefore, the Project would not be required to construct or expand recreational facilities. Accordingly, implementation of the proposed project would not result in the construction or expansion of recreational facilities which would have an adverse physical effect on the environment, and impacts would not be substantially greater than was identified in the previous EIR.